

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 118581

To: Terra Gibbs

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Art Unit: 1635

Search Notes

Wednesday, April 07, 2004

Case Serial Number: 10/033243

From: Beverly Shears Location: Remsen Bldg.

RM 1A54

Phone: 571-272-2528

beverly.shears@uspto.gov

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From:

Gibbs, Terra

Sent:

Friday, April 02, 2004 2:33 PM

To:

STIC-Biotech/ChemLib

Subject:

Sequence search...

Can you please do a search of SEQ ID NO:132 of USSN 10/033,243 in all regular and commercial databases?

Terra Cotta Gibbs, Ph.D. Art Unit 1635 Remsen Building 2D10 571-272-0758

1.PR - 2 2001

Searcher:
Phone:
Location:
Date Picked Up:
Date Completed:
Searcher Prep/Review:
Clerical:
Online time:

TYPE OF SEARCH:
NA Sequences:
AA Sequences:
Structures:
Bibliographic:
Litigation:
Full text:
Patent Family:
OH

VENDOR/COST (wi	nere applic.)
STN:	
DIALOG:	
Questel/Orbit:	
DRLink:	
Lexis/Nexis:	
Sequence Sys.:	
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SEARCH REQUEST FORM

	Requestor's Name:	Serial Number:									
	Date:	Phone:	A	rt Unit:							
	Search Topic: Please write a detailed statement of sterms that may have a special meaniplease attach a copy of the sequence	ng. Give examples or relevent c	itations, authors, keywo	rds, etc., if known? For sequences,							
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	Date completed: 04-06-0 Searcher: Beverly C Terminal time: 22	2528 Search	Site STIC CM-1	Vendors IG STN							
	Elapsed time: CPU time: Total time: 25		Pre-S f Search N.A. Sequence	Dialog APS Geninfo							
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FILE 'REGISTRY' ENTERED AT 08:18:30 ON 06 APR 2004 L1 26 S TCGTCGAACGTTCGAGATGAT/SQSN FILE 'HCAPLUS' ENTERED AT 08:19:36 ON 06 APR 2004 L2 7 S L1 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN L2 Entered STN: 22 Feb 2004 ACCESSION NUMBER: 2004:142919 HCAPLUS 140:198064 DOCUMENT NUMBER: TITLE: Particulate immunostimulant Van Nest, Gary; Tuck, Stephen INVENTOR(S): Dynavax Technologies Corporation, USA PATENT ASSIGNEE(S): PCT Int. Appl., 90 pp. SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE A2 20040219 WO 2003-US25415 20030812 WO 2004014322 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2002-402968P P 20020812 PRIORITY APPLN. INFO.: The authors disclose immunomodulatory compns. which comprise a cationic condensing agent, an immunomodulatory compound, and a stabilizing agent. The compns. of the invention typically form particles which have increased immunomodulatory activity as compared to immunomodulatory compds. not formulated in the compns. of the invention. Also provided are methods of making the compns. and methods for therapeutic use of the compns. In one example, interferon-y release by human mononuclear cells was shown to be enhanced by the combination of CpG oligonucleotide, polymyxin B, and Tween-80. IT 662376-82-1 RL: PRP (Properties) (unclaimed sequence; particulate immunostimulant) L2ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 15 Dec 2003 2003:975836 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 140:75912 TITLE: IL-10 regulates plasmacytoid dendritic cell response to CpG-containing immunostimulatory

Searcher: Shears 571-272-2528

sequences

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Duramad, Omar; Fearon, Karen L.; Chan, Jean H.; AUTHOR(S):

Kanzler, Holger; Marshall, Jason D.; Coffman,

Robert L.; Barrat, Franck J.

Dynavax Technologies Corporation, Berkeley, CA, CORPORATE SOURCE:

USA

Blood (2003), 102(13), 4487-4492 SOURCE:

CODEN: BLOOAW; ISSN: 0006-4971 American Society of Hematology

DOCUMENT TYPE: Journal LANGUAGE: English

Immunostimulatory sequences (ISS) are short oligonucleotides containing unmethylated cytosine-phosphate-guanine (CpG) dinucleotides that stimulate innate immune responses through Toll-like receptor-9 on B cells and plasmacytoid dendritic cell (PDC) precursors. The anti-inflammatory cytokine interleukin (IL)-10 is predicted to be a potent inhibitor of many of the activities described for ISS, and this may impact the use of ISS in disease states characterized by elevated IL-10. As the activities of ISS on PDCs are central to many clin. applications of ISS, we have studied the effects of IL-10 on PDC stimulation by 3 distinct classes of ISS. IL-10 inhibited cytokine production and survival of ISS-activated PDCs; however, IL-12 induction was much more sensitive to inhibition than interferon (IFN)- α induction. Within the PDC population are cells that respond to ISS by producing either IL-12 or IFN- α but not both cytokines. IL-12-producing PDCs require costimulation through CD40 and appear more mature than IFN- α -producing PDCs. The 3 distinct classes of ISS differed with respect to induction of PDC maturation and T-cell priming capacity. IL-10 regulated PDC activation but did not inhibit the subsequent T-cell-priming ability of PDCs already activated by ISS.

IT 640803-45-8

PUBLISHER:

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)

(IL-10 regulates plasmacytoid dendritic cell response to

CpG-containing immunostimulatory sequences)

THERE ARE 27 CITED REFERENCES AVAILABLE REFERENCE COUNT: 27

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN L2

Entered STN: 05 Dec 2003

ACCESSION NUMBER: 2003:950038 HCAPLUS

DOCUMENT NUMBER: 140:26897

TITLE: Chimeric immunomodulatory compounds comprising

two or more nucleic acid moieties and

non-nucleic acid spacer

Fearon, Karen L.; Dina, Dino; Tuck, Stephen F. INVENTOR(S):

PATENT ASSIGNEE(S): USA

U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of SOURCE:

U.S. Ser. No. 176,883.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

Shears 571-272-2528 Searcher :

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003225016	A1	20031204	US 2002-328578	20021223
US 2003175731	A1	20030918	US 2002-176883	20020621
US 2003199466	A1	20031023	US 2002-177826	20020621
PRIORITY APPLN. INFO.:	:		US 2001-299883P P	20010621
			US 2002-375253P P	20020423
			US 2002-176883 A2	20020621
			US 2002-177826 A2	20020621

AB The invention provides immunomodulatory compds. and methods for immunomodulation of individuals using the immunomodulatory compds. The immunomodulatory compds. comprise two or more nucleic acid moieties and a non-nucleic acid spacer moiety. The nucleic acid contains e.g. 5'-CG-3', 5'-TCG-3', 5'-TCGA-3', 5'-TCGACGT-3', or 5'-TCGACGA-3'; and the non-nucleic acid is an oligoethylene glycol such as hexaethylene glycol. The chimeric compds. are incorporated into endotoxin-free compns. comprising antigen, pharmaceutically acceptable excipient, and optionally a cationic microsphere for modulating immune response.

IT 631925-51-4P 631925-64-9P 631926-21-1P 631926-36-8P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (chimeric immunomodulatory compds. comprising two or more nucleic acid moieties and non-nucleic acid spacer)

L2 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 01 Jul 2003

AUTHOR(S):

ACCESSION NUMBER: 2003:499872 HCAPLUS

DOCUMENT NUMBER: 139:99590

TITLE: Rational design of new CpG oligonucleotides that

combine B cell activation with high IFN- α induction in plasmacytoid dendritic cells Hartmann, Gunther; Battiany, Julia; Poeck, Hendrik; Wagner, Moritz; Kerkmann, Miren;

Lubenow, Norbert; Rothenfusser, Simon; Endres,

Stefan

CORPORATE SOURCE: Department of Internal Medicine, Division of

Clinical Pharmacology, Ludwig-Maximilians-

University of Munich, Munich, Germany

SOURCE: European Journal of Immunology (2003), 33(6),

1633-1641

CODEN: EJIMAF; ISSN: 0014-2980

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

AB Two different types of CpG motif-containing oligonucleotides (CpG ODN) have been described: CpG-A with high induction of IFN- α in plasmacytoid dendritic cells; and CpG-B with little induction of IFN- α , but potent activation of B cells. In this study, we demonstrate that CpG-A fail to activate B cells unless plasmacytoid dendritic cells are present. We identified a new set of CpG ODN sequences which induces high levels of IFN- α in plasmacytoid dendritic cells but remains capable of directly activating B cells. These new CpG ODN (termed CpG-C) are more potent stimulants of B cells than CpG-B due to their ability of directly and indirectly

Searcher : Shears 571-272-2528

...;

(via plasmacytoid dendritic cells) activating B cells. The sequence of CpG-C combines structural elements of both CpG-A and CpG-B. The most potent sequence, M362, contains a 5'-end "TCGTCG-motif" and a "GTCGTT-motif", both of which are present in CpG-B (ODN 2006); a palindromic sequence characteristic for CpG-A (ODN 2216); but no poly G motif required for CpG-A. In conclusion, we defined the first CpG-containing sequences that potently activate both TLR9-expressing immune cell subsets in humans, the plasmacytoid dendritic cell and the B cell. CpG-C may allow for improved therapeutic immuno-modulation in vivo.

IT 557124-76-2P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (rational design of new CpG oligonucleotides that combine B cell activation with high IFN- α induction in plasmacytoid dendritic cells)

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN

34

ED Entered STN: 13 Jun 2003

ACCESSION NUMBER: 2003:453345 HCAPLUS

DOCUMENT NUMBER: 139:83598

TITLE: Identification of a novel CpG DNA class and

motif that optimally stimulate B cell and

plasmacytoid dendritic cell functions

AUTHOR(S): Marshall, Jason D.; Fearon, Karen; Abbate,

Christi; Subramanian, Sandhya; Yee, Priscilla; Gregorio, Josh; Coffman, Robert L.; Van Nest,

Gary

CORPORATE SOURCE: Dynavax Technologies Corporation, Berkeley, CA,

USA

SOURCE: Journal of Leukocyte Biology (2003), 73(6),

781-792

CODEN: JLBIE7; ISSN: 0741-5400

PUBLISHER: Federation of American Societies for

Experimental Biology

DOCUMENT TYPE: Journal LANGUAGE: English

AB Recent reports have identified two major classes of CpG motif-containing oligodeoxynucleotide immunostimulatory sequences (ISS): uniformly modified phosphorothicate (PS) oligodeoxyribonucleotides (ODNs), which initiate B cell functions but poorly activate dendritic cells (DCs) to make interferon (IFN)- α , and chimeric PS/phospho diester (PO) ODNs containing runs of six contiguous guanosines, which induce very high levels of plasmacytoid DC (PDC)-derived IFN- α but poorly stimulate B cells. The authors have generated the first reported ISS, C274, which exhibits very potent effects on all human immune cells known to recognize ISS. C274 is a potent inducer of IFN- γ /IFN- α from peripheral blood mononuclear cells and exhibits accelerated kinetics of activity compared with standard ISS. This ODN also effectively stimulates B cells to proliferate, secrete cytokines, and express costimulatory antigens. In addition, C274 specifically activates PDCs to undergo maturation and secrete cytokines, including very high levels of IFN- α . Sequence

Searcher : Shears 571-272-2528

variation studies based on C274 were used to identify the general motif requirements for this novel and distinct class of ISS. In contrast, chimeric PO/PS CpG-containing ODNs with Poly guanosine sequences exert a differential pattern of ISS activity compared with C274, perhaps in part as a result of their greatly different structural nature. This pattern is composed of high IFN- α /IFN- γ induction and low DC maturation in the absence of B cell stimulation. In conclusion, the authors have generated a novel class of ISS that transcends the limitations ascribed to classes described previously in that it provides excellent stimulation of B cells and simultaneously activates PDCs to differentiate and secrete large amts. of type I IFN.

554470-62-1P IT

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(identification of a novel CpG DNA class and motif that optimally stimulate B cell and plasmacytoid dendritic cell functions)

REFERENCE COUNT: 61

THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 05 Jan 2003

ACCESSION NUMBER: 2003:6160 HCAPLUS

138:88635 DOCUMENT NUMBER:

Chimeric immunomodulatory compounds comprising TITLE:

nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating

allergy, infection or cancer

Fearon, Karen L.; Dina, Dino; Tuck, Stephen F. INVENTOR(S):

Dynavax Technologies Corporation, USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 224 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA!	rent :	NO.		KI	ND	DATE		APPLICATION NO. DATE								
WO	2003000922			A	2	2003	0103		W	20	02-U	S200	25	25 20020621		
WO	2003000922		A	A3 20031023												
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	LC, LK,		LC, LK, LR, LS, LT, LU, 1		LV,	MA,	MD,	MG, MK, MN			, MW, MX	MX,	MZ,			
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PRIORIT	Y APP	LN.	INFO	.:				1	JS 2	001-	2998	83P	P .	2001	0621	
								1	US 2	002-	3752	53P	P	2002	0423	

The invention provides immunomodulatory compds. (CIC) and methods

571-272-2528 Searcher : Shears

for immunomodulation of individuals using the immunomodulatory compds. The CIC comprises one or more nucleic acid moieties and one or more non-nucleic acid moieties such as dendrimer, polysaccharide, and crosslinked polysaccharide through phosphodiester, phosphorothicate ester, phosphorodithicate ester, and other linkages. The CIC is capable of stimulating production of interferon γ and α by human peripheral blood mononuclear cells, as well as human B cell proliferation. Endotoxin-free compns. comprising the CIC covalently or non-covalently conjugated with antigen and cationic microsphere are useful for treating disorders associated with IgE or Th2-type immune response such as allergy, asthma, infection, viral infection, idiopathic pulmonary fibrosis, and cancer.

ΙT 482661-47-2P 482663-36-5P 482663-37-6P 482663-46-7P 482663-95-6P 482663-96-7P 482663-97-8P 483382-56-5P 483382-57-6P 483382-58-7P 483382-59-8P 483382-64-5P 483382-65-6P 483382-66-7P 483382-67-8P 483382-68-9P

> RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(chimeric immunomodulatory compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 05 Jul 2002 ED

ACCESSION NUMBER: 2002:504922 HCAPLUS

DOCUMENT NUMBER: 137:73254

TITLE: Immunomodulatory oligonucleotides containing immunostimulatory sequences for treatment of disorders associated with a Th2-type immune

response

Fearon, Karen L.; Dina, Dino INVENTOR(S):

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

PCT Int. Appl., 95 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KI	ND :	DATE			APPLICATION NO.					DATE				
WO 2002052002			A.	2 .	20020704			WO 2001-US50821 20011227									
WO 2002052002			Α	3 .	2003	0904											
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                                        US 2000-258675P
                                                         Ρ
PRIORITY APPLN. INFO.:
                                        WO 2001-US50821 W 20011227
                        MARPAT 137:73254
OTHER SOURCE(S):
    The invention provides immunomodulatory polynucleotides and methods
     for immunomodulation of individuals using the immunomodulatory
     polynucleotides. Each immunomodulatory polynucleotide comprises at
     lease one immunostimulatory sequence (ISS). Thus, administration of
     5'-tgactgtgaazgttzgagatga-3' (where z = 5-bromocytosine) in
     conjunction with hepatitis B surface antigen (HBsAg) to baboons
     resulted in increased titers of anti-HBsAg antibodies as compared to
     administration of HBsAg alone or to administration of HBsAg with a
     non-ISS oligonucleotide. Complexation of immunomodulatory
     polynucleotides with cationic poly(lactic acid, glycolic acid)
     microspheres in a human PBMC assay showed significantly enhanced
     induction of interferon \alpha and interferon \gamma in comparison
     to the polynucleotides alone.
     439891-56-2
     RL: PAC (Pharmacological activity); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (immunomodulatory oligonucleotides containing immunostimulatory
        sequences for treatment of disorders associated with a Th2-type
        immune response)
E1 THROUGH E25 ASSIGNED
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L3
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                631926-36-8/BI OR 640803-45-8/BI OR 662376-82-1/BI)
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L4
     ANSWER 1 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
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Searcher : Shears 571-272-2528

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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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Searcher: Shears 571-272-2528

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HITS AT:
          1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1:
               140:26897
    ANSWER 5 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
    631925-64-9 REGISTRY
RN
    DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
CN
    xy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-
    sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-
    propanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-
    A-sp-T), 5'-[O-(6-mercaptohexyl) hydrogen phosphorothioate] (9CI)
     (CA INDEX NAME)
CI
    MAN
    21
SQL
SEQ
        1 tcgtcgaacg ttcgagatga t
          ______ =
HITS AT:
          1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 140:26897
REFERENCE
    ANSWER 6 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
     631925-51-4 REGISTRY
CN
    DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
    xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
    ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
    idene) oxy] A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-
    G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
    ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
    1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-
    sp-A-sp-T) (9CI) (CA INDEX NAME)
CI
    MAN
SQL 21
SEO
        1 tcgtcgaacg ttcgagatga t
          _________
HITS AT:
          1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 140:26897
L4
    ANSWER 7 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
    557124-76-2 REGISTRY
RN
CN
    DNA, d(P-thio)(T-C-G-T-C-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A-T) (9CI)
                                                                   (CA
    INDEX NAME)
CI
    MAN
SQL
    21
SEQ
        1 tcgtcgaacg ttcgagatga t
```

Searcher: Shears 571-272-2528

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HITS AT:
                            1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                              1: 139:99590
            ANSWER 8 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
            554470-62-1 REGISTRY
RN
            DNA, d(P-thio)(T-C-G-T-C-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A-T) (9CI)
                                                                                                                                                                                 (CA
CN
            INDEX NAME)
CI
            MAN
SQL
            21
SEQ
                       1 tcgtcgaacg ttcgagatga t
                            HITS AT:
                            1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                              1: 139:83598
            ANSWER 9 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
            483382-68-9 REGISTRY
CN
            Poly(oxy-1,2-ethanediyl), \alpha-hydro-\omega-hydroxy-, ester with
            2'-deoxy-P-thioadenylyl-(3'->5')-2'-deoxy-P-thiocytidylyl-
             (3'\rightarrow5')-2'-deoxy-P-thioguanylyl-(3'\rightarrow5')-P-
            thiothymidylyl-(3'\rightarrow5')-P-thiothymidylyl-(3'\rightarrow5')-2'-
            deoxy-P-thiocytidylyl-(3'→5")-2'-deoxyguanosine
            3',5'-bis(dihydrogen phosphorothioate), 2'-deoxy-P-thioadenylyl-
             (3'\rightarrow5')-2'-deoxy-P-thioguanylyl-(3'\rightarrow5')-2'-deoxy-P-
            thioadenylyl-(3'→5')-P-thiothymidylyl-(3'→5')-2'-deoxy-
            P-thioguanylyl-(3'\rightarrow5')-2'-deoxy-P-thioadenylyl-(3'\rightarrow5')-
            thymidine 5'-(dihydrogen phosphorothioate) and P-thiothymidylyl-
             (3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidylyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-(3'\rightarrow5')-2'-deoxy-P-thiocytidyl-
            thioguanylyl-(3'\rightarrow5')-P-thiothymidylyl-(3'\rightarrow5')-2'-deoxy-
            P-thiocytidylyl-(3'→5')-2'-deoxy-P-thioguanylyl-
             (3'→5')-2'-deoxyadenosine 3'-(dihydrogen phosphorothioate)
             (2:1:1:1) (9CI) (CA INDEX NAME)
CI
            MAN
SQL
            21
SEQ
                       1 tcgtcgaacg ttcgagatga t
                            HITS AT:
                            1 - 21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                              1: 138:88635
            ANSWER 10 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
            483382-67-8 REGISTRY
RN
CN
            DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
            xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
            ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-
            sp-G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
            ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-
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Searcher: Shears 571-272-2528

```
(CA INDEX NAME)
          sp-A-sp-T-sp-G-sp-A-sp-T) (9CI)
CI
          MAN
SQL
          21
                   1 tcgtcgaacg ttcgagatga t
SEQ
                        _________
HITS AT:
                        1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                                  138:88635
REFERENCE
                          1:
          ANSWER 11 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
           483382-66-7 REGISTRY .
          {\tt DNA, \ d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)only)} \\
CN
          xy-1,6-hexanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-sp-
          T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,6-
          hexanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-A-
           sp-T) (9CI) (CA INDEX NAME)
CI
          MAN
SQL
          21
SEQ
                   1 tcgtcgaacg ttcgagatga t
                        HITS AT:
                        1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                          1: 138:88635
REFERENCE
L4
          ANSWER 12 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
RN
           483382-65-6 REGISTRY
          DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosp
CN
           xy-1,4-butanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-sp-
          T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,4-
          butanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-A-
           sp-T) (9CI) (CA INDEX NAME)
          MAN
CI
          21
SOL
SEO
                    1 tcgtcgaacg ttcgagatga t
                        1-21
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                          1: 138:88635
          ANSWER 13 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
           483382-64-5 REGISTRY
           DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
CN
           xy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-
           sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-
           propanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-
           A-sp-T), 5'-[0-[6-[(6-hydroxyhexyl)dithio]hexyl] hydrogen
           phosphorothioate] (9CI) (CA INDEX NAME)
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Searcher: Shears 571-272-2528

```
CI
          MAN
SOL
          21
SEO
                    1 tcgtcgaacg ttcgagatga t
                        ______ __ __ __ __ __ _
HITS AT:
                        1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                                   138:88635
REFERENCE
                          1:
           ANSWER 14 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
           483382-59-8 REGISTRY
RN
CN
           DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
           xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
           ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
           idene) oxy] A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-
           G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
           ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
           1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-
           sp-A-sp-T), 3'-[0-(3-mercaptopropyl) hydrogen phosphorothioate]
           (9CI) (CA INDEX NAME)
CI
          MAN
SQL
           21
SEO
                    1 tcgtcgaacg ttcgagatga t
HITS AT:
                        1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                          1:
                                   138:88635
           ANSWER 15 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
           483382-58-7 REGISTRY
           DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
CN
           xy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-
           sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-
           propanediyloxy (mercaptophosphinylidene) oxy] A-sp-G-sp-A-sp-T-sp-G-sp-
           A-sp-T), 3'-[0-[3-(3-mercaptopropoxy)propyl] hydrogen
           phosphorothioate] (9CI) (CA INDEX NAME)
          MAN
CI
SQL 21
SEQ
                    1 tcqtcqaacg ttcqaqatga t
                        _____ =
HITS AT:
                        1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                          1: 138:88635
           ANSWER 16 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
1.4
RN
           483382-57-6 REGISTRY
           DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosphinylidene)oxy(mercaptophosp
CN
           xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
```

Searcher : Shears 571-272-2528

```
ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
     idene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-
     G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
     ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
     1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-
     sp-A-sp-T), 5'-[O-(6-mercaptohexyl) hydrogen phosphorothioate] (9CI)
     (CA INDEX NAME)
CI
    MAN
SQL
    21
SEO
        1 tcgtcgaacg ttcgagatga t
          ------
HITS AT:
          1 - 21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 138:88635
    ANSWER 17 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
     483382-56-5 REGISTRY
    DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
CN
    xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
    ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
    idene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-
    G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
     ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
     1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-
     sp-A-sp-T), 5'-[0-[6-[(6-hydroxyhexyl)dithio]hexyl] hydrogen
    phosphorothioate] (9CI) (CA INDEX NAME)
CI
    MAN
SQL
   21
SEO
        1 tcgtcgaacg ttcgagatga t
          -------
HITS AT:
          1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1:
               138:88635
    ANSWER 18 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
     482663-97-8 REGISTRY
    DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
CN
    xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
     ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
    idene) oxy-1,3-propanediyloxy (mercaptophosphinylidene) oxy]A-sp-C-sp-G-
    sp-T-sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,2-
     ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
     1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-
     G-sp-A-sp-T-sp-G-sp-A-sp-T) (9CI) (CA INDEX NAME)
CI
    MAN
SQL
    21
SEQ
         1 tcqtcqaacg ttcgagatga t
           ______
HITS AT:
          1 - 21
```

Shears

Searcher :

571-272-2528

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**RELATED SEOUENCES AVAILABLE WITH SEOLINK**
           1: 138:88635
REFERENCE
    ANSWER 19 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
    482663-96-7 REGISTRY
RN
CN
    DNA, d(T-sp-C-sp-G-sp-T-sp-C-sp-G-sp-A[oxy(mercaptophosphinylidene)o
    xy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-
    ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy(mercaptophosphinyl
    idene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-
    G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
    ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-1,2-ethanediyloxy-
    1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-
    sp-A-sp-T), 3'-[0-[3-[(3-hydroxypropyl)dithio]propyl] hydrogen
    phosphorothioate] (9CI) (CA INDEX NAME)
CI
    MAN
SQL 21
SEQ
        1 tcgtcgaacg ttcgagatga t
          ------
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 138:88635
    ANSWER 20 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
     482663-95-6 REGISTRY
    CN
    xy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-
    sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-
    propanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-
    A-sp-T), 3'-[0-[3-[3-[(3-hydroxypropyl)dithio]propoxy]propyl]
    hydrogen phosphorothioate] (9CI) (CA INDEX NAME)
CI
    MAN
SQL 21
SEO
        1 tcgtcgaacg ttcgagatga t
          _____ =
HITS AT:
          1-21
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 138:88635
    ANSWER 21 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
L4
RN
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CN
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     sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-
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     (CA INDEX NAME)
CI
    MAN
SQL 21
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Shears

Searcher :

571-272-2528

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         1 tcgtcgaacg ttcgagatga t
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
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    ANSWER 22 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
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    propanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
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    ANSWER 23 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN
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     G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
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HITS AT:
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
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     G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediyloxy-1,2-
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Searcher :

571-272-2528

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1,2-ethanediyloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-Gsp-A-sp-T), 3',3''',3''''-[0,0',0''-[nitrilotris[2,1-ethanediyl(2,5dioxo-1,3-pyrrolidinediyl)thio-3,1-propanediyl]] tris(hydrogen phosphorothioate)] (9CI) (CA INDEX NAME) CI MAN SQL 63,21,21,21 SEQ 1 tcgtcgaacg ttcgagatga t ______ HITS AT: 1-21 SEO 1 tcgtcgaacg ttcgagatga t HITS AT: 1-21 SEQ 1 tcgtcgaacg ttcgagatga t ------HITS AT: 1-21 REFERENCE 1: 138:88635 ANSWER 25 OF 25 REGISTRY COPYRIGHT 2004 ACS on STN RN **439891-56-2** REGISTRY DNA, d(T-C-G-T-C-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A-T) (9CI) (CA INDEX CN NAME) OTHER NAMES: 132: PN: WO02052002 SEQID: 132 claimed DNA CN CI MAN SQL 21 SEQ 1 tcgtcgaacg ttcgagatga t HITS AT: 1-21 **RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1: 137:73254 REFERENCE

FILE 'HOME' ENTERED AT 08:20:41 ON 06 APR 2004

Searcher: Shears 571-272-2528

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OM nucleic - nuc Run on: Title: Perfect score:	GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. nucleic search, using sw model April 5, 2004, 21:36:48; Search time 2880 Seconds (without alignments) 316.043 Million cell updates/sec US-10-033-243-132
Scoring table: Searched:	IDENTITY_NUC Gapop 10.0 , Gapext 1.0 3470272 segs, 21671516995 residues
ber of	5
Minimum DB seq l Maximum DB seq l	length: 0 length: 2000000000
Post-processing:	: Minimum Match 0% Maximum Match 100% Listing first 45 summaries
Database :	GenEmbl:* 1: gb_ba:* 2: gb_htg:* 3: gb_in:* 4: gb_om:* 5: gb_ow:* 6: gb_ov:* 7: qb_ph:*
·	8: gb_D: * 9: gb_or: * 10: gb_ro: *
	11: gb_sts:* 12: gb_sy:* 13: gb_un:* 14: gb_vi:*
	15: em_ba:* 16: em_fun:* 17: em_hum:*
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| No. | Score | Query | Natich Length DB | ID | Description | National Sequence | 2 | 19 | 90.5 | 26 | AX5992340 | AX592240 Sequence | 2 | 19 | 90.5 | 22 | 6 | AX5992340 | AX592240 Sequence | 2 | 19 | 90.5 | 22 | 6 | AX5992340 | AX592240 Sequence | 2 | 19 | 10.8 | 80.0 | 19 | 6 | AX5992340 | AX592236 Sequence | 2 | 10.8 | 80.0 | 30471 | 3 | AF257633 | AF257633 | AF257633 | AF257633 | AF257634 | AF257

ALIGNMENTS

JOURNAL Patent: W	TITLE Immunomod	AUTHORS Fearon, K.	REFERENCE 1	artificia	ORGANISM synthetic	SOURCE synthetic	KEYWORDS .	VERSION AX592442.	ACCESSION AX592442	DEFINITION Sequence	LOCUS AX592442	AX592442	RESULT 1
Patent: WO 02052002-A 132 04-JUL-2002;	Immunomodulatory polynucleotides and methods of using the same	Fearon, K.L. and Dina, D.		artificial sequences.	synthetic construct	synthetic construct		AX592442.1 GI:27950544		Sequence 132 from Patent WO02052002.			
04-JUL-2	eotides a									WO0205200	21 bp		
002;	nd methods									2.	DNA 1		
	of.										linear		
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	the										AT 2		
	same										PAT 27-JAN-2003		

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Location/Qualifiers
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Location/Qualifiers
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Direct Submission
Submitted (22-MAR-1996) Institute for Plant Physiology, Justus Submitted (12-MAR-1996) Institute for Plant Physiology, Justus Liebig University, Heinrich Buff Ring 58-62, Giessen 35392, Gel (bases 28701 to 75580) genome J. Mol. Evol. 51 20496959 Porphyridiaceae; Cyanidium.

1 (bases 130696 to 132364)

Vogel, H., Fischer, S. and Valentin, K.

A model for the evolution of the plastid
from secY gene phylogeny

Plant Mol. Biol. 32 (4), 685-692 (1996) AF022186 164921 bp Cyanidium caldarium strain RK1 AF022186 Z36235 Z70297 AF022186.2 GI:6466296 Glockner, G., Rosenthal, A. and Valentin, K. The structure and gene repertoire of an a Cyanidium caldarium Eukaryota; Rhodophyta; Bangiophyceae; Porphyridiales; The structure chloroplast Cyanidium caldarium (bases 46857 (bases 1 to 164921) and gene ç (4), 382-390 (2000) ancient red sec apparatus inferred algal plastid

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		CDS	mRNA	gene						CDS		mRNA	e de la companya de l		tRNA					CDS	HANNIII	TONA	gene					CDS		m PNA	gene				C)	mRNA	gene
/ COMMI_BCAILE1 /transl_table11 /product="unknown" /protein_id="AAF13020.1"	/gene="atp8" /note="ATP synthase CF1 beta chain" /ooden etartal	/product="unknown" 50046476	5004 .6476 /gene="atob"	50046476 /gene="atpB"	PNLVQALNNIAVIYHYYGNKLFEQSKLQEAKLMFDKASNYWRKAIKLAPYNYIEAQNW LKITGRITEDIML"	<pre>/translation="mprsQkvDnFiDkTFSIIADLIVKILPTNKESKEAFYYYKDGMA AQSEGEYAEALACYYQALKIEKDPMDKSFILYNIGLIQASNGQHARALEYYHESLKFN</pre>	/protein_id="AAF13021.1" /db_xref="GI:6466440"	/product="unknown"	/gduc- for /codon start=1 /tenno	44504971	/gene="ycf3" /product="unknown"	/note="81m11ar to yold in Porphyra purpurea" 44504971	:		<pre>/translation="MTKLKSLLNDKKLTLISCLNKTIYDIN" 43344406</pre>	/db_xref="GI:6466441"	/product="unknown" /protein id="aaF11022.1"	/codon_start=1 /transl_table=11	4_	/product="unknown" 41894272	dene="ccrf10"	/gene="ccrf10" /180 4372	NKFYKNTKNKKYIDIWLIFYIYYHIYLRIGKNQTKDLQITKC" 41894272	/translation="MNNCLPKNKVFKILNFFKCIDPMCTDNLFKFPLYKLNKNKGKFT	/protein_id="AAF13023.1" /db_xref="G1:6466442"		/gene="ccri9" /codon_start=1	/product="unknown"	/gene-"ccrf9"	/gene="ccrf9" 1871	LSQLSDPYLNLFHGVFPSFLGIDFSPIIGITLIDFIIELLSRQLKPL" 3873 . 4133	<pre>/db_xref="GI:6466443" /translation="MKDGTDLILETTIAFLQIYIVLILLRMSLGWFPNINWYSQPFYS</pre>	<pre>/product="unknown" /protein_id="AAP13024.1"</pre>	/codon_start=1 /transl_table=11	/gene="ycf19"	/gene="yctly" /product="unknown"	<pre>/note="similar to ycf19 in Porphyra purpurea" 35463821</pre>	3821 /cf19"

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Patent: WO 02052002-A 57 04-JUL-2002;
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Location/Qualifiers
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Timarcha recticollis 5.8S rRNA gene (partial), 28 and ITS2, isolate 160.
AJ512595
AJ512595.1 GI:33945511
28S ribosomal RNA; 28S rRNA gene; 5.8S ribosomal gene; internal transcribed spacer 2; ITS2.
Timarcha recticollis
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Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 3041)
Duvernell,D.D. and Eanes,W.F.
Contrasting molecular population genetics of four hexokinases prosophila melanogaster and Drosophila simulans
Genetics (2000) In press
Genetics (2000) In press
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                                                            Submitted (19-APR-2000) Ecology and Evolution,
New York, Stony Brook, NY 11794, USA
Location/Qualifiers
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Submitted (07-OCT-2002) Gomez-Zurita J., D.
The Natural History Museum, Cromwell Road,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           I
Gomez-Zurita,J. and Vogler,A.P.
Incongruent nuclear and mitochondrial phylogeographic patterns in
                                                                                                                      2 (bases 1 to 3041)
Duvernell,D.D. and Eanes,W.F.
Direct Submission
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80. .622
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  /organism="Drosophila simulans"
/mol_type="genomic DNA"
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Pred. No. 2.5e+02;
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Drosophila simulans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.

[ (bases 1 to 3047)
Duvernell,D.D. and Eanes,W.F.
Contrasting molecular population genetics of four hexokinases in Drosophila melanogaster and Drosophila simulans
Genetics (2000) In press
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                                                                                                 Submitted (19-APR-2000) Ecology New York, Stony Brook, NY 11794,
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                                                                                                                                            Direct Submission
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Duvernell, D.D. and Eanes, W.F.
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Location/Qualifiers
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organism="Drosophila simulans"
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join(1609 .2118,2190. .3041)
/codon start="
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<1. .>1398
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JPQISIAVDGGIYRLHPTFATVLNKYTRLLADPNYNFEFVITQDSCGVGAAIMAGMAH
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Drosophila simulans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Reptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Rephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 3047)
Duvernell, D. and Eanes, W.F.
Contrasting molecular population genetics of four hexokinases in Drosophila melanogaster and Drosophila simulans
Genetics (2000) In press
(bases 1 to 3047)
Duvernell, D.D. and Eanes, W.F.
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                                                                                                                                                                                       Submitted (19-APR-2000) Ecology and Evolution, State University of New York, Stony Brook, NY 11794, USA
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IMGSIANSCYVERVERCETYEGDEFRRLMIINSDMAHFGDTGQLDFIRNEFDRLLDTI
IMGSIANSCYVERVERCETYEGDEFRRLMIINSDMAHFGDTGQLTTITUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTUMGITTU
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VSDPPGVYTKAQEVMDKFRIRHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRNR
LPQISIAVDGGIYRLHPTFATVLNKYTRLLADPNYNFEFVITQDSCGVGAAIMAGMAH
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PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
APGEYRNCNKVLSELGILGCQEPDKEALRYICEAVSSRSAKLCACGLVTIINKMNINE
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/product="hexokinase-t2"
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/db_xref="GI:10765242"
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/mol_type="genomic DNA"
/strain="CT96_5s"
                                                                                                         Location/Qualifiers
                                                                              organism="Drosophila simulans"
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Duvernell,D.D. and Banes,W.F.
Duvernell,D.D. and Eanes,W.F.
Contrasting molecular population genetics of four hexokinases
Drosophila melanogaster and Drosophila simulans
Genetics (2000) In press
2 (bases 1 to 3047)
Duvernell,D.D. and Eanes,W.F.
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                                                                                                                                                                              Submitted (19-APR-2000) Ecology and I
New York, Stony Brook, NY 11794, USA
Location/Qualifiers
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Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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| RAVIKCPVSHYODLPTGKERGKYLALDLGGSNFRVLLVNLISNSDVEIMSKGYNFPLT
| RAVIKCPVSHYODLPTGKERGKYLALDLGGSNFRVLLVNLISNSDVEIMSKGYNFPLT
| LMSGSGKALFDFLAESLSEFCHTHGLENESLPLGFTESFPLOOGGLSKGILVAMTKGF
| CEGVVGKNVVSLLQEALDRGGIKINTVAILANDTVGTLMSCAFYHPNCRIGLIVGTG
| SCEGVVGKNVVSLLQEALDRGGIKINTVAILANDTVGTLMSCAFYHPNCRIGLIVGKVTPN
| SNACYVEKTVAAECFECYGTSPKPSMIINCEWGAFGDNGVLEFVGTSYDKIVDKVTPN
| SNACYVEKTVAAECFECYGTSPKPSMIINCEWGAFGDNGVLEFVGTSYDKIVDKVTPN
| CEGVYRKTVAAECFECYGTSPKSMIINCEWGAFGDNGVLEFVGTSTINKNNINE
| DEGYTRACKVLSELGILGCOEPDKEALRYICEAVSSRSAKLCACGLVTIINKNNINE
| POLICIA STANDARD | POLICIA STANDA
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/product="hexokinase-ti"
/protein_id="AAG22947.1"
/db_xref="GI:10765247"
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            /organism="Drosophila simulans"
/mol type="genomic DNA"
/strain="CT96_6s"
/db xref="taxon:7240"
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/protein_id="AAG22948.1"
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/product="hexokinase-t2"
join(1615. .2124,2196. .3047)
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Best Local :
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 3047)
Duvernell, D.D. and Eanes, W.F.
Contrasting molecular population genetics of four hexokinases in Drosophila melanogaster and Drosophila simulans
Genetics (2000) In press
2 (bases 1 to 3047)
Duvernell, D.D. and Eanes, W.F.
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                                                                                                                                                           Submitted (19-APR-2000) Ecology and Evolution, State University of New York, Stony Brook, NY 11794, USA
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AF257641
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/db_xref="01:10765251"
/db_xref="01:10765251"
/db_xref="01:10765251"
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SCEGVVGKNVVSLLOEAIDRRGDIKINTVAILNDTVGTLMSCAFTHPNCRIGLIVGTG
SCEGVVGKNVVSLLOEAIDRRGDIKINTVAILNDTVGTLMSCAFTHPNCRIGLIVGTON
SCEGVVGKNVVSLLOEAIDRRGDIKINTVAILNDTVGTLASCAFTNTSVDKIVDKVTPN
PGKOTFEKCTSGMYMGELVALVVIDMIAKGYMFHGIISEKIOERWSFKTAYISDVESD
APGEYRNCNKVLSELGILGCOEPDKEALRYICEAVSSRSAKLCAGLVTIINKMNINE
VVIGIDGSVYRFHPKYHDMLQYHMKKLLKPGVKFELIVSEDGSGRGAALVAATAVQAK
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RDHHDRSTVPCHLSYVODLFTGRERGOFLALEMMPTNCRIMLVERSSERDIYTSSKCV
IMPHTVAAGRCTEVFTELATIIANFVERKKUNLFLGIAFAFTLKKLALDVGILVS
WTKEFGAQGAIGKDVVQLLEDALAKFPEISVDVMGIINVGAGSLLALCWAQPDTRIGL
IMFSIANSCYVERVERCETYEGDEFRRLMIINSDAHFGDTGQLDFIRNEFDRLLDTD
SINFGTRIYEKFSGALCMGELVRIIVLRLMKAGAIFAEDRRDYIGIQMKLDMVSLIEI
VSDPGVYTKAQEVMDKERIRHCKERDLAALKYICDTVTNTAAMILVASGVSCLLDRMF
LPQIISIAVDGGIYRLHFTFATVLNKYTRLLADPNYNFEFVITQDSCGVGAAIMAGMAH
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join(<1615. .2124,2196. .>3047)

/product="hexokinase-t2"

join(1615. .2124,2196. .3047)
                                                             /organism="Drosophila simulans"
/mol_type="genomic DNA"
/strain="VA96_5s"
                                                                                                                                            Stony Brook, NY 11'
Location/Qualifiers
  /product="hexokinase-t1"
                                      db_xref="taxon:7240"
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/db_xref="GI:10765250"
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Pred. No. 36
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KEYWORDS
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                                                                                                                                                                FEATURES
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JOURNAL
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                                        mRNA
SdC
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CDS
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1 (bases 1 to 3047)

1 Duvernell, D.D. and Eanes, W.F.

Contrasting molecular population genetics of four hexokinases in Drosophila melanogaster and Drosophila simulans

Genetics (2000) In press
                                                                                                                                                                                                                                      Direct Submission
Submitted (19-APR-2000) Ecology
New York, Stony Brook, NY 11794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila simulans strain VA96_8s hexokinase-t1 and genes, complete cds.
                                                                                                                                                                                                                                                                                                                              2 (bases 1 to 3047)
Duvernell, D.D. and Eanes, W.F.
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Drosophila simulans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF257643.1 GI:10765258
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                                           /db_xref="taxon:7240"
                                                                                       /mol_type="genomic DNA"
/strain="VA96_8s"
                                                                                                                                                                                                       Location/Qualifiers
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LMSGSGKALFDFLAESLSEFCHTHGLENESLPLGFTFSFPLQQGGLSKGILVAMTKGF
SCEGVVGKNVVSLLQEAIDRRGDIKINTVAILNDTVGTLMSCAFYHPNCRIGLIVGTG
SCAGVVEKTVNAECFEGYQTSPKESMIINCEMGAFGDNGLLEFVRTSYDKIVDKVTPN
PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
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RDHHDRSTVPCHLSYVQDLFTGRERGQFLALEMPTNCRIMLVKFSSERDIYTSSKCV
IMPHTVAAGRGTEVETFLATIIANFYVEKKYDKDNLFLGIAFAFTLKKLALDVGILVS
IMPHTVAAGRGTEVETFLATIIANFYVEKKYDKDNLFLGIAFAFTLKKLALDVGILVS
WTKEEGAQGAIGKDVQLLRDALAKFPEISVDVMGIINVGAGSLLALCWAQPDTRIGL
IMGSIANSCYVERVERCETYEGDEFRRLMIINSDWAHFGDTGQLFIRNFFDRLLDTD
SINPOTRIVEKFSGALCMGELVRIULTLALKKAGAIFAEDRRDYIGIOWKLDDWSLIEI
VSDPPGVYTKAQEWDKFRIRHCKERDLAALKYICDTVTNRAAMLVAASGVSCLIDRMR
                                                                                    strain="VA96
                                                                                                                                               organism="Drosophila simulans"
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join(<1615. .2124,2196. .>3047)
/product="hexokinase-t2"
join(1615. .2124,2196. .3047)
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/product="hexokinase-t1"
product="hexokinase-t1"
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/product="hexokinase-t2"
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/db_xref="GI:10765253"
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/db_xref="GI:10765254"
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AF257646/c
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Duvernell,D.D. and Eanes,W.F.
Contrasting molecular population genetics of four hexokinases
Drosophila melanogaster and Drosophila simulans
Genetics (2000) In press
2 (bases 1 to 3047)
Duvernell,D.D. and Eanes,W.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drosophila simulans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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AF257646
AF257646.1 GI:10765267
                                                                                                                                                                                                                                                                                                                                            Submitted (19-APR-2000) Ecology and Evolution, State University of New York, Stony Brook, NY 11794, USA Location/Qualifiers
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18; Conservative
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RDHHBRSTVPCHLSYVQDLFPGRERGOFLALEMMFTWCRIML/WESSERDIYTSSKCV 
IMPHTVAAGRGTEVFTFLATIIANFVKEKVDKDULFLGIAFAFTLKKLALDWGILVS 
WTKEFGAQGAIGKDVVQLLRDALAKFPEISVDVMGIINVGAGSLLALCWAQPDTRIGL 
IMGSIANSCYVERVERCETYEGDEFRRLMIINSDWAHFGDTGQLDFIRNEFDRILDTD 
SINPGTRIYEKFSGALCMGELVRIULTULRLKKAGAIFAEDRRDYIGIOMKLDBWSLLDIU 
VSDPFGVYTKAQEVMDKERIRHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRMR 
LPQISIAVDGGIYRLHFTFATVLNKYTRLLADDNYNFEFVITQDSCGVGAAIMAGMAH
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/product="hexokinase-
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/protein_id="AAG22955.1"
/db_xref="GI:10765259"
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/product="hexokinase-t2"
join(1615. .2124,2196. .3047)
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                                                                                                                                                                                        /organism="Drosophila simulans"
/mol_type="genomic DNA"
/strain="GA96_5s"
                                                                                                                                                /db_xref="taxon:7240"
codon_start=1
                                                                        product="hexokinase-tl"
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Pred. No. 3e
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in GA96_5s hexokinase-t1 and hexokinase-t2
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VERSION ACCESSION

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RESULT 17
AF257642/c
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Drosophila simulans strain VA96_7s hexokinase-tl and
Genes. Complete CAC
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1 (bases 1 to 3050)

Duvernell, D. D. and Eanes, W. F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF257642.1 GI:10765255
                                                                                                                                                                                                                                                                                                                 Submitted (19-APR-2000) Ecology and Evolution, State University of New York, Stony Brook, NY 11794, USA
                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
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Pred. No. 3e+C
O; Mismatches
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Duvernell, D.D. and Eanes, W.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila simulans

Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.
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Duvernell, D.D. and Eanes, W.F.
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                                                                                      product="hexokinase-t1"
                                                                                                                               db_xref="taxon:7240"
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RESULT 18

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'product="hexokinase-t2"
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CDS mRNA

l Similarity 18; Conserv CGTCGAACGTTCGAGATGAT 21 CGTCGAACGATCGTGATGAT 137 80.0%; nilarity 90.0%; Conservative 0, Pred. No. 3e+(); Mismatches Score 16.8; Pred. No. 3e 3e+02; DB ω --2 Length 3050; Indels <u>,</u> Gaps 0

genes, co AF257645 Direct Submission
Submitted (19-ARR-2000) Ecology and Evolution,
New York, Stony Brook, NY 11794, USA
Location/Qualifiers Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Neoptera; Endopterygota; Diptera; Brachycera; Muscc Ephydroidea; Drosophilidae; Drosophila. Genetics (2000) In p 2 (bases 1 to 3050) Contrasting molecular population genetics of four Drosophila melanogaster and Drosophila simulans 1 (bases 1 to 3050 Duvernell, D.D. and AF257645 3050 bp Drosophila simulans strain GA96_4s Duvernell, D.D. Drosophila Drosophila simulans AF257645.1 GI:10765264 complete /product="hexokinase-t1"
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JOURNAL REFERENCE

AUTHORS TITLE

JOURNAL

FEATURES

mRNA Sg

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AF257647/c
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Submitted (19-APR-2000) Ecology a
New York, Stony Brook, NY 11794,
Location/Qualifiers
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Duvernell, D.D. and Eanes, W.F.
Contrasting molecular population genetics of four hexokinases in
Drosophila melanogaster and Drosophila simulans
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2 (bases 1 to 3050)
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Drosophila simulans
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
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PGKQTFEKCISGMYMGELVFLVVLDMIAKGFMFHGIISEKIQEMSFKTAYISDVESD
PGKQTFEKCISGMYMGELFGLUVGCBEDKEALRYICEAUSSB&AKLCACGLVTIINKMNINE
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IMPHTVAAGRGTEVFTFLATIIANFVKEKKVDKDNLPLGIAFAFTLKKLALDVGILVS
WTKEFGAGAIGKDVVOLLRDALAKFPEISVDVMGIINGAGSLLALCMAQPDTRIGL
IMGSIANSCYVERVERCETYEGDEFRRLMIINSDWAHFBOTTQGLDFIRMEFDRLLDTD
SINDGTRIYEKFSGALCMGELVRIIVLALMKAGAIFAEDRRDYIGIQWKLDMVSLIEI
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/db_xref="taxon:7240"
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/product="hexokinase-t1"
                                                                                                                                                                                                                                                    organism="Drosophila simulans"
                                                                                                                                   product="hexokinase-t1"
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1 (bases 1, to 3050)

Duvernell, D.D. and Eanes, W.F.

Contrasting molecular population genetics of four hexokinases

Drosophila melanogaster and Drosophila simulans
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Duvernell, D.D. and Eanes, W.F.
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Drosophila simulans strain HFL97_2s hexokinase-t1 and
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SKRVVSLLQEAIDRRGDIKINTVAILUDTVGTLMSCAFYHFNKRIGLIVGKTFN
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PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERMSFKTAYISDVESD
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AND APGEYRNCNKYLSELGILGCOEPDKEALRYICEAVSTROWNING
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IMPHTVAAGRGTEVFTFLATIIANFVKEKKVDKDNLPLGIAPAFTLKKLALDVGILVS
WTKEFGAQGAIGKDVVQLLRDALAFRPEISVVMNIINVGAGSLLALCMAQPDTRIGL
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SINPGTRIYEKFSGALCMGELVRIIVLRLMKAGAIFADDRDYIGIQWKLDMVSLIEI
VSDPPGVYTKAQEVWDKFRIEHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRMR
VSDPPGVYTKAQEVWDKFRIEHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRMR
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/db_xref="taxon:7240"
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                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Drosophila simulans"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contrasting molecular population genetics of four hexokinases Drosophila melanogaster and Drosophila simulans Genetics (2000) In press 2 (bases 1 to 3050)

Divernell, D. D. and Eanes, W.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila simulans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Bukaryota; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AP257649 3050 bp DNA linear INV 09-OCT-2000 Drosophila simulans strain HFD97_4s hexokinase-t1 and hexokinase-t2
                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (19-APR-2000) Ecology and Evolution, State University of New York, Stony Brook, NY 11794, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 3050 Duvernell, D.D. and )
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
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SNACYVEKTVNAECFEGYQTSPKPSMIINCEWGAFGDNGVLEFVRTSYDKIVDKVTPN
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VSDPPGVYTKAQEVMDKFRIRHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PGKQTFEKCISGMYMGELVRLVVIDMIAKGFMFHGIISEKIQERWSFKTAYISDVESD
APGEYRNCNKVLSELGILGCQEPDKEALRYICEAVSSRSAKLCACGLVTIINKMNINE
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                                                                                                                                                                                                  product="hexokinase-tl"
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AC141727/c
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CE 1 (bases 1 to 146568)

RS Muzny, D. M., Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C., Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Alsbrooks, S.L., Amaratunge, K., Blankenburg, K., Bonnin, D., Barbaria, J., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Barbaria, J., Benton, J., Bimage, K., Brown, M., Bryant, N.P., Buck, J., Burch, P., Chacko, J., Chavez, D., Carter, M., Cavazos, S.R., Chacko, J., Chavez, D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., Chen, R., Chen, R., Chen, R., D., Dathorne, S.R., David, R., Davis, C., Davy, Carroll, L., Dederich, D.A., Davis, C., Davy, Carroll, L., Dederich, D.A., Davis, C., Davy, Carroll, L., Dederich, D.A., Davis, C., Davy, Carroll, L., Dederich, M., C., Escotto, M., Falls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Garza, N., Gill, R., Gortell, J.H., Guevara, W., Garner, T., Garza, N., Gill, R., Gorzell, J.H., Guevara, W., Ganaratne, P., Hale, S., Hamilton, K., Harris, C., Harris, K., Harris, M., Havlak, P., Hawes, A., Hernandez, J., Jacobson, B., Jia, Y., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Kall, Y., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Kall, S., Khan, U., King, L., Korvah, J., Kovar, C., Liu, J., Liu, W., Loulseged, H., Lozado, R.J., Lu, X., Lucier, R., Lucier, R., Lucier, M., Martinez, E., Mahisey, E., McLeod, M.P., Meador, M., Mei, G., Metzker, M., Massey, E., Mitchell, T., Mohabbat, K., Morgan, M., Morris, S., Minner, G., Mitchell, T., Mohabbat, K., Morgan, M., Morris, S.,
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Apis mellifera (honeybee)
Apis mellifera
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Apis mellifera clone CH224-57G3, WORKING DRAFT SEQUENCE, 25
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Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apoidea;
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AC141727
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SINPGTRIYEKFSGALCMGELVRIIVLRLMKAGAIFAEDRRDYIGIQWKLDMVSLIEI
VSDPPGVYTKAQEVMDKFRIRHCKERDLAALKYICDTVTNRAAMLVASGVSCLIDRMR
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Moser, M., Neal, D., Newtson, J.; Newtson, N., Nguyen, A., Nguyen, N., Nickerson, E., Nwokenkwo, S., Oguh, M., Okwuonu, G., Oragunye, N., Oviedo, R., Pace, A., Payton, B., Peery, J., Perez, L., Peters, L., Pickens, R., Primus, E., Pu, L. L., Quiles, M., Ren, Y., Peters, L., Pickens, R., Primus, E., Pu, L. L., Quiles, M., Ren, Y., Pires, M., Rojas, A., Rojubokan, I., Rolfe, M., Ruiz, S., Savery, G., Schergren, E., Sonaike, T., Sparks, A., Stanley, H., Stone, H., Sodergren, E., Sonaike, T., Sparks, A., Tamerisa, K., Tang, H., Sutton, A., Svatek, A., Tabor, P., Tamerisa, A., Thomas, N., Thomas, S., Usmani, K., Vasquez, L., Vera, V., Villalon, D., Vinson, R., Wang, O., Warlingson, S., Warren, R., Washington, C., Watlington, S., Wulliamson, A., Warren, R., Washington, C., Watlington, S., Wu, Y., Wu, Y. F., Zhou, J., Zorrilla, S., Nelson, D., Weinstock, G., and Gibbs, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (19-MAR-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Worley, K.C.
Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NOTE: Estimated insert size may differ from sequence length
(see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft data.)
NOTE: This is a 'working draft' sequence. It currently
consists of 25 contigs. The true order of the pieces
is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jnpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
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Center clone name: CH224-57G3
Center clone name: CH224-57G3
------ Summary Statistics
Sequencing vector: Plasmid;
Chemistry: Dye-terminator Blg Dye: 100% of reads
Chemistry: Dye-terminator Blg Dye: 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 132495 bases at least Q30
Consensus quality: 137202 bases at least Q30
Consensus quality: 140042 bases at least Q20
Estimated insert size: 137866; sum-of-contigs estimation
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Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
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11037
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contig of 1559
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contig of 1555
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contig of 1423
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Apis mellifera"
/mol_type="genomic DNA"
/db_xref="taxon:7460"
/clone="CH224-57G3"
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/db_xref="taxon:32630"
                                                                                         /note="Polynucleotide containing
                                                                                                                      organism="synthetic construct"
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/5: contig of unknow.
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CC Strandedness: Single;
CC Topology: Linear;
CC Immunostimulatory oligonucleotides, compositions thereof ar methods of
CC methods of
CC use thereof
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                                                                                                  Raz,E., Roman,M. and Dina,D.
Immunostimulatory oligonucleotides, compositions thereof methods of use thereof
Patent: US 6589940-A 4 08-JUL-2003;
                                                                                                                                                                                                                                                                                                                                            Sequence 4 from patent US
AR352575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunostimulatory oligonucleotides, compositions thereof methods of use thereof. Patent: JP 2002517156-A 4 11-JUN-2002;
DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 23)
Schwartz,D., Roman,M., Dina,D. and Raz,E.
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                                                                                                                                                                                                                           Unclassified.
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ilarity 94.4%;
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06-JUN-1997 US 60/048793
DAVID SCHWARTZ,MARK ROMAN,DINO DINA,EYAL
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/mol_type="genomic DNA"
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                                                                                      S 6589940-A 4 08-JUL-2003;
Location/Qualifiers
                'mol_type="genomic DNA"
                                           organism="unknown"
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RESULT 28
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17; Conservative
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Sequence 3 from Patent WO0135991
AX148638
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db xref="taxon:32630"
/note="synthetic construct"
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/mol_type="unassigned DNA"
/mol_tyte="taxon:32630"
/noTe="Synthetic construct"
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from Patent W00112223
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Pred. No. 2.8e+02;
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RESULT 30
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AX250703/c
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AX252511/c
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Methods of suppressing hepatitis virus infection using immunomodulatory polynucleotide sequences
Patent: WO 0168078-A 3 20-SEP-2001;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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Sequence 3 from Patent W00168078.
AX250703
AX250703.1 GI:15984441
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Patent: WO 0168117-A 3 20-SEP-2001;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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synthetic construct
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Sequence 3 from Patent WO0168117.
AX252293
AX252293.1 GI:15985634
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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                      from Patent
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AX252936/c
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AX252522/c
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Sequence 3 from Patent WO0168144.
AX252522
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synthetic construct
artificial sequences.
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Sequence 3 from Patent W00168143
AX252936
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Dynavax
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Immunomodulatory formulations and
                                        artificial sequences.
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Technologies Corporation (U.
Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/db_xref="taxon:32630"
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Pred. No. 2.8e+02;
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Pred. No. 2.8e+02;
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AX253125/c
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Matches 17
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                                                       van Nest,G.

Wethods of preventing and treating viral immunodulatory polynucleotide sequences Patent: WO 0168077-A 3 20-SEP-2001;

Dynavax Technologies Corporation (US)

Dynavax Technologies Technologies Corporation (US)
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17; Conserv
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Sequence 3 from Patent WO0168077.
AX253125
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Technologies Corporation (U
Location/Qualifiers
               /organism="synthetic construct'
/mol_type="unassigned DNA"
/mol_type="unassigned
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Polynucleotide containing CG"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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                                                                                                                                Local Similarity hes 17; Conserv
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Gaston Cremieux, 91057 Evry cedex, FRANCE
PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA:
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbsgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).
155
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T-DNA integration into the Arabidopsis genome depends on sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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left border; T-DNA flanking
Arabidopsis thaliana (thale
Arabidopsis thaliana
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416 bp DNA linear PLN 29-MAR-2003
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                                                         TCGAACGTTCGAGATGAT 21
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TCGAACGGTCGAGATGAT 172
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30 Rep. 3 (12), 1152-1157 (2002)
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                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                 /clone lib="Arabidopsis thaliana T-DNA insertion lines" 1.416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
/cultivar="Wassillewskija"
/db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                        /note="T-DNA
left border"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Arabidopsis thaliana"
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Pred. No. 2.8e+02;
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Rounsley,S.D., Lin,X., Kaul,S., Shea,T.P., Fujii,C.Y., Mason,T.M., Shen,M., Ronning,C.M., Fraser,C.M., Somerville,C.R. and Venter,J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arabidopsis thaliana chromosome complete complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (27-FEB-2002) The Institute for Genomic Research, Medical Center Dr. Rockville, MD 20850, USA, cdtown@tigr.or. On Apr 18, 2002 this sequence version replaced gi:6598455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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                                                                                                                                                                                                                                                                                                                   Ceres: 3626. .
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                                                                                                                                                                                                                                                                                                                                        /gene="At2g46735"
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Ceres: 105240"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /trānslation="mGIAELEPSRLCCLCNRHIDGTTNESNVVVKLRSNASDIIWEVK
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KVRKITLVDRYGVKREMSLKPEDRYGRMSSSHDTSLWSIDLKGKVNGAVETCGVTFHR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="synonym: F19D11.1; predicted by cjoin(<69. .118,1498. .1713,1897. .>2125)
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/mol_type="genomic DNA"
/cultivar="Columbia"
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/gene="At2g46740"
/note="synonym: F
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3684. .4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="At2g46730"
join(69. .118,1498. .1713,1897. .2125)
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  F19D11.2"
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2 clone F19D11 map CIC06C03,
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PSQGKVVYRNDDRVANNTLGNGLYDFFFFRSQLSAVLATTRSSEETGETLRDAHGKCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt family="AT_rich"
complement(7652..10055)
/gene="At2946750"
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VKGVEYHQTTESIELTQVKSEINDIKSLLKIDSKSLCGLELYYGILMRYVTSSEAYLG
KETEAIDEDITYYRANDELTERLYEDEIEEIEQIALLKYNALEHWGKNRNLAFDGVIK
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complement(join(<7652. .8379,8469.
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       AYLGKETEALDFDLTYYRAKDPLSPRLYEDFIEEIEQIALFKYNALPHWGKNRNLAFD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family="(A)n"
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17; Conserv
                                                                  73921 bp
Arabidopsis thaliana genomic DNA,
AB024024 BA000015
                                                                                                                                                                                                                                                                                                4 TCGAACGTTCGAGATGAT 21
                                                   AB024024 BA000015
AB024024.1 GI:4519183
     Arabidopsis thaliana (thale cress)
                                                                                                                                                                                                                                                                                                                                                 Conservative
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GRDKIIYSNGRRIGMRKTLVFYKGRAPHGQKSDIMHEKYTLDDNIISPEDTVTHEFOFLOOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt_family="AT_rich"
complement(19052, .19082)
/rpt_family="x"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    complement (26557...26579)
/rpt_family="AT_rich"
complement (26928...26979)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt family="AT_rich" complement (23224. .23252) /rpt family="AT_rich" 24246 24246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rpt_family="AT_rich"
28087. .28145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rpt_family="AT_rich"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IIGBASQDBGWVVCRIFKKKNLHKTLNSPVGGASLSGGGDTPKTTSSQIFNEDTLDQF
LELMGRSCKEELNLDPFMKLEWLESPNSALINNCHVSSDTNINHVSNVVDTSPVTS
WAALDRLVASQLNGPTSYSITAVNBSHVGHDHLALPBVRSPVPSLNRSASYHAGLTQE
YTPEMELMNTTTSSLSSSPGPFCHVSNVLLLLVCLLRLQLQFWPFQPWQRQVHFDLSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rpt_family="(TA)
complement(18735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_family="AT_rich"
complement(16139. .16:
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AHCAPTKGYFCRPGKVYKEARVCTRADDISVIQSLSY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  complement (join (19507. .19622,20137.
21845. .22028))
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/note="~~~
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                                                                                                                                                                                                                                                                                                                                                                                                                                            rpt_family="(TAAAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'gene="At2g46770"
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complement(join(<19507. .19622,20137. .20749,21247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene="At2g46770"
                                                                                                                                                                                                                                                                                                                                                                     78.1%;
94.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .24279
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                                                                                                                                                                                                                                                  23478
                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                              Score 16.4; DB 8;
Pred. No. 7.3e+02;
0; Mismatches 1
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                                                                                                   chromosome
                                                                                                                          DNA
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                                                                                                                                                                                                                                                                                                                                                                                            Length 68415;
                                                                                              5, TAC clone:K15C23.
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                                                                                                                          PLN 27-DEC-2000
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REFERENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Address for correspondence: Rossekzusa.or.jp
Address for correspondence: Rossekzusa.or.jp
For the latest information on annotation of this clone, please see
http://www.kazusa.or.jp/kaos/cgi-bin/agd_graph.cgi?c=K15C23
Genes with similarity to proteins in the databases are described in
'product' or 'note' qualifiers. Genes that have no significant
protein similarity are described as 'unknown protein'.
The software programs used to predict genes include: Grail
(Informatics Group, Oak Ridge National Laboratory,
http://compbio.ornl.gov/Grail-1.3/).
MetGene2 (S.M. Hebsgaard, et al., CBS, Technical University of
Denmark, http://www.bbs.dtu.dk/services/NetGene2/) and
SplicePredictor (Volker Brendel, Stanford University,
http://gremlinl.zool.iastate.edu/ggi-bin/sp.cgi).
Genes encoding tRNAs are predicted by tRNAscan-SB (Sean Eddy, Washington University School of Medicine, St. Louis,
http://genome.wusfl.edu/eddy/tRNAscan-SB/).
This sequence may not be the entire insert of this clone. It may be
shorter because we remove overlaps between neighboring submissions.
The 5' clone is MFC16 and the 3' clone is K23L20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (24-FEB-1999) Yasukazu Nakamura, Kazusa DNA Research Institute, Department of Plant Gene Research; 1532-3, Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:ynakamu@kazusa.or.]p,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel:81-438-52-3935, Fax:81-438-52-3934)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                              codon_start=1
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QTTVVGGFTIPKDSKLFINAWAIHRNPNVWENPLKFDDDRFLDMSYDFKGNDENYLPF
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VHFGTTTDHILDEALSFTLNHLESLATGRRASFPHISKLIQNALHIPQHRNIQALVAR
EYISFYEHEEDHDETLLKLAKLNFKFLQLHYFQELKTITMWWTKLDHTSNLPPNFRER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56823. .56961,57075. .57284,57478. .57771)
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complement(join(58589. .58741,58812. .58942,59021. .59131,59131. .59131). .59508,59508 .59769,59855 .60068,59181 .59360,594432 .609486,60607 .60721,60809 .61056,60181 .61205,61289 .61484,61588 .61781,61890 .62052,
                                                                                                                                                                                                                                                                                                             TVETWFAALMMYFEPQFSLGRIMSAKLYLVITFLDDACDTYGSISEVESLADCLERWD
PDYMENLQGHMKTAFKFVMYLFKEYEEILRSQGRSFVLEKMIEEWARGGHVPSFDEYI
ESGGAEIGTYATIACSIMGLGEIGKKEAFEWLISRPKLVRILGAKTRLMDDIADFEED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /evidence=not_experimental
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/product="flavonoid 3′,5′-hydroxylase-like; cytochrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       codon_start=1
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. .43066,43141. .43193,43279. .43452,43534. .43666,
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Best Local
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          The
     Rice Full-Length cDNA Consortium, National Institute of
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Sg

CDS

SdC

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AKI00785.1 GI:32985994
FLI_CDNA; CAP trapper.
Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
                                                                                                                                                                                                                                              Oryza sativa (japonica cultivar-group) cDNA clone: J023120N10, full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 TCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                 AK100785
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                       insert sequence.
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ATSAYQVEGAAHEDGRGPSIWDTFSEKYPEKIKDGTNGSIASDSYHLYKEDVGLLHQI
GFGAYRFSISWSRILPRGNLKGGINQAGIDYYNNLINBLLSKGIKPFATIFHWDTPQS
LEDAYGGFFGAEIVNDFRDYADICFKNFDERVCHWMTLNEPLTVVQQGYVAGVNAFGR
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PYTESAEDRLAAARAMAFTFDYFMEPLVTGKYPUDWNNVKJORLFTFTAKGSKMLKG
SYDFIGINYYSSSYAKUVPCSSENVTLESDFASUTGERPIGFKAASDWLLIYPK
GIRDLLLYAKYKFKDPWWYITENGRDEASTGKIDLKDSERIDYYAQHLKWQDAISIG
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join(65551...6595,65972...66016,66102...66215,66686...66766,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /translation="MTTQIFQLPLKYCASSFSSTGQRNYGASSSPSTIVICKSNGISD GLWVKRKNNRRFGSLLVKQEKGDVTEIRVFVITLEQQEKEKDKGDEDEDIDGDV GLWVKRKKNNRRFGSLLVKQEKGDVTEIRVFVITLIKIDDFELBRRFLLGIEDADTPSGDV DEDLKYVNEIKRVIELIKRRNRDMIFSEVKLIMIBDPRELBRRFLLGIEDADTPSGD DLAEALEQVNDGKIFKORATLANLHEEMIRWFVIEVEVSKKQRGKSMYAKSTDTGIDF KEAAKKLNVEWDSAAAIEEVDVDDEQGVVTKVAGYGALYFVSALPVIIGISVVLILFY
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67046. .67213,67358. .67447
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unknown protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /translation="MVAAVLMPTISERDESAREDWQVLSRNDSKKKILVKQTSMMQSE
REISMDSKJIRSLSMGSSLRRNDSFDMVRLPAMSFPDLDSFMPLPLQPVQTTGSPKQ
REISMDSKJIRSLSMGSSLRRNDSFDMVRLPAMSFPDLDSFMPLPLQPVQTTGSPKQR
KEQDSLPNSTTGSPKQRSGLMRALRNKEQDSSSASYKRSKSCGSTSKTLSHKSSGIRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /evidence=not_experimental
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /evidence=not_experimental
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pir||T05327
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94.4%;
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Agrobiological Sciences Rice Full-Length cDNA Project Team: Kikuchi, S., Satoh, K., Nagata, T., Kawagashira, N., Doi, K., Kishimoto, N., Yazaki, J., Ishikawa, M., Yamada, H., Ooka, H., Hotta, I., Kojima, K., Namiki, T., Ohneda, E., Yahagi, W., Suzuki, K., Li, C., Ohtsuki, K., Shishiki, T., Foundation of Advancement of International Science Genome Sequencing & Analysis Group: Otomo, Y., Murakami, K., Iida, Y., Sugano, S., Fujimura, T., Suzuki, Y., Tsunoda, Y., Kurosaki, T., Kodama, T., Masuda, H., Kobayashi, M., Xie, Q., Lu, M., Narikawa, R., Sugiyama, A., Mizuno, K., Yokomizo, S., Nikura, J., Ikeda, R., Sugiyama, A., Mizuno, K., Yokomizo, S., Nikura, J., Kusumegi, T., Oka, M., Ryu, R., Ueda, M., Matsubara, K., RIKEN; Kusumegi, T., Oka, M., Ryu, R., Ueda, M., Matsubara, K., RIKEN; Kawai, J., Carninci, P., Adachi, J., Aizawa, K., Arakawa, T., Fukuda, S., Hara, A., Hashidume, W., Hayatsu, N., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kondo, S., Konno, H., Miyazaki, A., Osato, N., Ota, Y., Yoshinno, M. and Hayashizaki, Y. Shibata, K., Shinagawa, A., Shiraki, T., Yoshino, M. and Hayashizaki, Y.
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                                                                                                        Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in Riken: Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Carninci, P., Fukuda, S., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hori, F., Iida, J., Imamura, K., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kanagawa, S., Katoh, H., Kawai, J., Kishikawa-Hirozane, T., Kojima, Y., Kondo, S., Konno, H., Kouda, M.,
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Submitted (27-AUG-2002) Shoshi Kikuchi, National Institute of Agrobiological Sciences, Department of Molecular Genetics, Head of Laboratory of Gene Expression; 2-1-2 Kannondai, Tsukuba, Ibaraki 305-8602, Japan (E-mail:skikuchi@nias.affrc.go.jp, Tel:81-29-838-7007, Fax:81-29-838-7007)
This clone is one of the 28K full-length cDNA clones from japonica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FAIS Genome Sequencing & Analysis Group: Otomo,Y., Iida,Y., Fujimura,T., Ikeda,R., Ishibiki,J., Kawamata,M., Kobayashi,M., Kodama,T., Kurosaki,T., Kusumegi,T., Lu,M., Masuda,H., Miura,J., Kodama,T., Kurasaki,T., Kusumegi,T., Lu,M., Masuda,H., Miura,J., Mizuno,K., Narikawa,R., Niikura,J., Oka,M., Ryu,R., Sugano,S., Sugiyama,A., Suzuki,Y., Tsunoda,Y., Ueda,M., Xie,Q., Yokomizo,S., Yoshimura,A., Matsubara,K. and Murakami,K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         URL : http://cdna01.dna.affrc.go.jp/cDNA/
NIAS Rice Full-Length cDNA Project Team: Kikuchi,S., Satch,K.,
Nagata,T., Kawagashira,N., Doi,K., Kishimoto,N., Yazaki,J.,
Ishikawa,M., Yamada,H., Ooka,H., Hotta,I., Kojima,K., Namiki,T.,
Ohneda,E., Yahagi,W., Suzuki,K., Li,C., Ohtsuki,K., Shishiki,T.
Kishikawa-Hirozane, T., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., Nakamura, M., Nishi, K., Nomura, K., Numasaki, R., Ohno, M., Osato, N.,
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Diego, 9500 Gilman Drive, La Jolla,
Location/Qualifiers
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Rosenfeld, M.G.
RLIM inhibits functional activity of LIM homeodomain transcription factors via recruitment of the histone deacetylase complex Nat. Genet. 22 (4), 394-399 (1999)
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Gallus gallus
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/translation="messdssdkgnidoseaorogoldredreeafyofvnnlseedy
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Epsgedlensosspinpyseaprrshnytssottedasprgsrtrohytlrohavg
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/db_xref="GI:4959046"
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85.7%;
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TGLSETTSVALIOTMLROLMTIGGELSYEMYSDSDADPSGPTENQNVDASEPONGGSGS
SSNESTDVSGEVFEGSNEGGSTSGARREGRUTTGSVTFEESGSLPFLLAAGPFLLNE
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Query Match
Best Local Similarity 85.7%; Pred. No. 6.3e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 TCGTCGAACGTTCGAGATGAT 21
Db 894 TGGTCAAACGTTTGAGATGAT 874

Search completed: April 6, 2004, 03:01:50

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The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide

Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

WPI; 2002-657426/70.

Claim 4; Page 21; 95pp; English.

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ABL09428	AAS61149	ABL70537	ABK31236	ABQ67039	ABL09440	ABL09441	ADB88893	ABQ75223	ADB88936	AAV17086	ADC91948	ACA33960	ABL12594	ABQ14748	ABQ14749	ACA47671	ABL12595	ABA03858	AAS16350	AAS16339	ABA03846
Ab109428	Aas61149	Ab170537	Abk31236	Abq67039	Ab109440	Ab109441	Adb88893	Abq75223	Adb88936	Aav17086	Adc91948	Aca33960	Ab112594	Abq14748	Abq14749	Aca47671	Abl12595	Aba03858	Aas16350	Aas16339	Aba03846
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ALIGNMENTS

Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; allergy; asthmaniasis; cibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic; 05-NOV-2002 ABQ75182; ABQ75182 standard; DNA; 04-JUL-2002. Synthetic. Fearon KL, 27-DEC-2000; 2000US-0258675P 27-DEC-2001; 2001WO-US050821 WO200252002-A2. virucide; antibacterial; protozoacide; ss. ISS immunomodulatory oligonucleotide SEQ ID NO:132. (DYNA-) DYNAVAX TECHNOLOGIES Dina D; (first entry) 21 CORP

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RESULT 2
ABQ75170
ID ABQ7
XX ABQ75170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunostimulatory sequence; ISS: immunomouuracury, immunostimulatory sequence; ISS: immunomouuracury, immunostimulatory fibrosis disease; interferon-gamma; IFN-gamma; adiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; ISE-related disorder; antiallergic; antiasthmatic; immunoglobulin E; ISE-related disorder; ss.
comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucida antibacterial and protozoacide activities, and can be used as a modulated to the matter of the m
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
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The invention relates to novel immunomodulatory polynucleotide/ microcarrier complexes comprising heptameric oligonucleotides comprising a 5, CG-3, sequence. A complex of the invention has antiasthmatic, antiallergic, antiinflammatory, cytostatic, virucide, hepatotropic, protozoacide, antiulcer, and dermatological activity. The complexes are useful for modulating an immune response, increasing interferon-gamma, increasing interferon-alpha, and reducing levels of IgEr. The complexes can also be used in vaccines, to treat, for example, asthma, rhinitis,
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                                                                                                                                                                                                Immunomodulatory polynucleotide/microcarrier complexes that can increase levels of interferon-gamma and interferon-alpha and reduce levels of
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having immunomodulatory activity, comprising two or more nucleic acid come non-nucleic acid spacer moiety is covalently joined to two nucleic come non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CC CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Thi-type cimmune response which is an allergy or allergy-induced asthma, and an CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-CC alpha; in an individual, where the individual has idiopathic pulmonary CC siphosis, or a viral infectious. CIC's are useful for ameliorating a CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related CC disorder in an individual, where the IgE-related disorder is allergy, or
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                                                                                                                                                                                                                                                                                                                               Disclosure;
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23-APR-2002;
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                                                                                                                                                                                                                                                                                                                             English.
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RESULT 5
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The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an CC immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (INP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and CC did a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an CC individual suffering from disorders associated with a Th2-type immune cresponse, especially an allergy associated with a Th2-type immune cresponse, especially an allergy associated with a Th2-type immune cresponse, especially an allergy interferon-gamma (IFN-gamma) in an CC individual having idiopathic pulmonary fibrosis, or IFN-gamma) in an CC individual having a viral infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, cc toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound
                                                                                                                                                                                                                                                                                                                                                                                 Immunomodulatory polynucleotide for modulating an immune response in subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
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                                                                                            The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric could moiety compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is an allergy or allergy-induced asthma, and an infectious disease. CIC is a number of the individual has idiopathic pulmonary is a second or a viral infection. CIC's are useful for ameliorating a complete or a viral infection. CIC's are useful for ameliorating as a second or a viral infection. CIC's are useful for ameliorating as a complete or a viral infection. CIC's are useful for ameliorating as a complete or a viral infection.
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                                symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 34; 224pp; English.
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       are also useful
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Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound of the invention.
The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (IS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is useful for modulator or an infectious disease.
                                                                                                                                                                                                                                              Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISS immunomodulatory oligonucleotide SEQ ID NO:24.
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having immunomodulatory activity, comprising two or more nucleic acid moleties and one or more nucleic acid spacer moleties acid spacer moleties, where at least one non-nucleic acid spacer molety is covalently joined to two nucleic acid moleties, where the spacer is not a polypeptide, and at least one nucleic acid molety comprises the sequence 5.-CG-3. The chimeric immunodulatory compounds more specifically contain the nucleic acid spacer moleties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma;, or IFN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 33; 224pp;
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23-APR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a novel chimeric immunomodulatory compound
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Pred. No. 10;
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Best Local :
The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (INP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antisthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE) related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polymucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunomodulatory polynucleotide for modulating an immune r subject suffering from disorders associated with Th2-type response, e.g. allergy, or infectious disease, comprises a immunostimulatory sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; disease; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; coxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
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comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmanlasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
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94.7%;
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The invention relates to a novel chimeric immunomodulatory compound (CIC) Chaving immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-cipha; in an individual, where the individual has idiopathic pulmonary compounds infections or a viral infection. CIC's are useful for ameliorating a
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symptom of an infectious disease, or an immunoglobulin E (IGE)-related disorder in an individual, where the IGE-related disorder is allergy, an allergy-related disorder. CIC's are also useful for treating cancer, and can be used for stimulating cellular immune system cells production.

production allergy, or

cancer

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RESULT 12
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2002US-0375253P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82.9%;
94.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tuck SF
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Pred. No. 21;
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The present comprising a

polynucleotide/microcarrier

comprising an immunostimulatory sequence (ISS). Also described: (1) immunomodulatory composition comprising (I); (2) an immunomodulatory

invention describes an immunomodulatory polynucleotide (I)

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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, of an allergy-related disorder. CIC's are allergy-related disorder. CIC's are allo useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compounds the sequence which is a nucleic acid moiety part of a chimeric immunodulatory compounds.
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                                                            Example 1;
                                                                                                             subject suffering
                                                                                                                                                    WPI; 2002-657426/70
                                                                                                                                                                                                                               27-DEC-2000; 2000US-0258675P
                                                                                                                                                                                                                                                       27-DEC-2001; 2001WO-US050821
                                                                                                                                                                                                                                                                                  04-JUL-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABQ75174;
                                                                                                            Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune
                                                                                                                                                                                                       (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                    immunostimulatory sequençe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 BP; 3 A;
                                                                                                   e.g. allergy, or infectious
                                                            Page
                                                                                                                                                                            Dina D;
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                                                                                                                                                                                                                                                                                                                                                             *tag=
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94.7%;
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                                                                                                                                                                                                                                                                                                                                   "5-bromocytosine"
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                                                          English
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                                                                                                    disease,
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                                                                                                    comprises
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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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Best Local :
The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one
                                                                                                                                                                                                                                                                                                   Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treat cancer, has nucleic acid moieties and non-nucleic acid spacer mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunocless; Transparents.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-JUN-2001; 2001US-0299883P.
23-APR-2002; 2002US-0375253P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunoglobulin E; IgE; allergy; cancer;
stimulating cellular immune system cell; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DYNA-) DYNAVAX TECHNOLOGIES
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                                                                                                                                                                                                                                 Page 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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89.5%;
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                                                                                                                                                                                                                                 224pp; English.
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                                                                                                                                                                                                                                                                                                      for treating spacer moieties
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cc immunodulatory comprises the sequence 5'-CG-3'. The chimeric cc immunodulatory compounds more specifically contain the nucleic acid cc spacer modeties of linear hexaethylene glycol structure (HEG) subunits. CC CIC's are useful for modulating an immune response in an individual, cc immune response which is an allergy or allergy-induced asthma, and an CC infectious disease. CIC is also useful for increasing IFN-gamma;, or IFN-CC alpha; in an individual, where the individual has idiopathic pulmonary CC fibrosis, or a viral infection. CIC's are useful for ameliorating a CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related CC disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer CC and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound of the invention.
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
                                                                                                                                     Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ75165 standard;
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                                                                                                                                                                                                                               Fearon KL,
                                                                                                                                                                                                                                                                                           27-DEC-2000;
                                                                                                                                                                                                                                                                                                                          27-DEC-2001; 2001WO-US050821.
                                                                                                                                                                                                                                                                                                                                                                                       WO200252002-A2
                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                  virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISS immunomodulatory oligonucleotide SEQ ID NO:14.
                                                                                                                     response, e.g. allergy, or infectious immunostimulatory sequence.
                                                                                                                                                                                                                                                              (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                 2002-657426/70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TNGTNGAACGTTCGAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  antibacterial; protozoacide;
                                                                                      Page
                                                                                                                                                                                                                               Dina D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 4 A;
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                                                                                                                                                                                                                                                                                           2000US-0258675P
                                                                                      20; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
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The present invention describes an immunomodulatory polynuclectide (comprising an immunostimulatory sequence (ISS). Also described: (1) immunomodulatory composition comprising (I); (2) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynuclectide/microcarrier (INF)MC) complex, comprising (I) linked biodegradable MC, where the MC is less than 10 micrometre in size; and biodegradable MC, where the MC is less than 10 micrometre in size; and biodegradable MC, where the MC is less than 10 micrometre in size; and biodegradable MC.

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Example

(3) a kit comprising (I). (I) has antiallergic, antiasthmat antibacterial and protozoacide activities, and can be used of immune response. (I) is useful for modulating an immune

antiasthmatic, virucide,

modulator

in an

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RESULT 16
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antibacterial and protozoacide activities, and can be used as a modulato of immune response. (I) is useful for modulating an immune response in a individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schiscosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE) related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the
                                                                                                                                                                                                                                                                                                                                                                                                                                 chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer molety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer;
                                                                                                                                                                                                                                                                21-JUN-2001;
23-APR-2002;
                                                                                                                                      activity,
                                                                                                                                                                               WPI; 2003-210159/20
                                                                                                                                                                                                                                                                                                         21-JUN-2002; 2002WO-US020025
                                                                                                                                                                                                                                                                                                                                      03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                       stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                     Novel
                                                                                                                                                                                                          Fearon KL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chimeric immunomodulatory compound DNA sequence, SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB88833;
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                                                                                                                                                                                                                                    (DYNA-) DYNAVAX TECHNOLOGIES CORP.
                                                                                                                                   chimeric immunomodulatory ity, useful for modulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTCGAACGTTCGAGATG
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                                                                                                                                                                                                          Dina
                                                                                                                                                                                                                                                                                                                                                                                                                       cellular immune system cell; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                2001US-0299883P.
2002US-0375253P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                          á
                                                                                                                   nomodulatory compound having immunomodulatory modulating an immune response and for treating acid moieties and non-nucleic acid spacer moieties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78.1%;
94.4%;
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                                                                                                                                                                                                          Tuck SF
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Pred. No. 71;
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cc immunodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CC CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-calpha; in an individual, where the individual has idiopathic pulmonary CC fibrosis, or a viral infectious CIC's are useful for ameliorating a CC symptom of an infectious disease, or an immunoglobulin E (IgE) related disorder in an individual, where the IgE-related disorder is allergy, or CC and can be used for stimulating cellular immune system cells production CC in an individual. This polynucleotide sequence represents a DNA sequence of the invention acid moiety part of a chimeric immunodulatory compound
                                                           of the invention.
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Sequence 18 BP; 4 A; 4 C; (J) Ģ, ຫ .. H 0 U; 0 Other;

밁 S Matches Query Match Local l Similarity 17; Conser N CGTCGAACGTTCGAGATG 19 CTTCGAACGTTCGAGATG 78.1%; ilarity 94.4%; Conservative 18 <u>,</u> Pred. Score 16.4; Mismatches No. DB 8; ۲. Length 18; Indels 0 Gaps

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0;

RESULT 17
AAV80099/c
ID AAV800
XX AAV800
XX Immuno
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XX Immuno
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CC at lea
CC gacgue
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CC gacg AAV80098; AAV80098 standard; (first entry) DNA; 23

Immunomodulatory oligo comprising an ISS sequence.

B. pertussis; Immunomodulatory; immunostimulatory; octanucleotide; immune regulations: cancer; allergy; asthma; hepatitis B infection; papillomavirum immunodeficiency virus; influenza; herpes; M. tuberculosis; malaria; plasmodia; Leishmania; Trypanosoma; Schistosoma papillomavirus;

10-DEC-1998

05-JUN-1998; 98WO-US011578

06-JUN-1997; 97US-0048793P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

'n Roman M, Dina D;

WPI; 1999-059898/05.

contain Immunostimulatory oligonucleotides regulate the immune contain an immune-stimulating octanucleotide sequence; allergic and infectious diseases. system - and for treating

Page 29; 63pp; English

The invention relates to immunomodulatory oligonucleotides that comprise at least 1 immunostimulatory octanucleotide sequence (ISS) where the ISS sequences are selected from the group consisting of AACGTTCC, AACGTTCG, GACGTTCC. The immunomodulatory sequences are used to treat patients needing immune regulation, such as those suffering from cancer, an allergic disease and asthma. They are also used to prevent infectious diseases such as influenza, herpes, hepatitis B, human immunodeficiency and papillomavirus, Hemophilus influenza, Mycobacterium tuberculosis and Bordetella pertussis, malarial plasmodia, Leishmania, Trypanosoma and

having immunomodulatory activity, comprising two or more nucleic aci moieties and one or more non-nucleic acid spacer moieties, where at one non-nucleic acid spacer moiety is covalently joined to two nucle acid moieties, where the spacer is not a polypeptide, and at least c nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

least one nucleic Disclosure;

Page nucleic

33;

224pp; English.

has

invention

relates to a novel chimeric

immunomodulatory compound

acid least (CIC)

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J.
DYNAMER SERVER SERVE
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Query Match
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                                                                                                                                                      immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS). This sequence represents an ISS that can be used in the composition. An immunostimulatory composition which comprises a gp120 conjugated to an immunomodulatory polynucleotide, or is proximately associated to it and not conjugated, is used for modulating or stimulating a specific immune response against gp120 an an individual by producing anti-gp120 antibodies or gp120 specific cycotoxic T cells. It is also used for suppressing or delaying development of HIV infection in an individual infected with HIV or an individual at risk of infection with HIV, respectively. It is also used for treating an individual infected with HIV or an individual an individual infected with HIV or an individual an individual infected with HIV or an individual an individual infected with HIV in need of immune modulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      development;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunostimulatory sequence; ISS; immunomodulator; glycoprotein 120;
gp120; human immunodeficiency virus; HIV; immune response; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anti-HIV composition comprises immunostimulatory polynucleotides and glycoprotein gp120 useful for modulating, stimulating an immune respondents HIV in an HIV infected individual.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-OCT-1998;
07-OCT-1999;
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                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 16; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            comprising a human immunodeficiency virus (HIV) antigen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DYNA-) DYNAVAX TECHNOLOGIES CORP
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                                                                                                             23
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                                                                                                          B₽;
  Conservative
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99US-00415186.
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                                                                                                          A:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schwartz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78.1%;
94.4%;
                           78.1%;
94.4%;
                                                                                                          8 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23
                                                                                                             w
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                          G;
  Score 16.4; D
Pred. No. 72;
0; Mismatches
     0
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Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Takabayashi K;
                                                                                                             6 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunostimulatory composition virus (HIV) antigen, and an
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U;
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                                                       DB 3;
                                                                                                             Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                     Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Indels

Gaps

RESULT 20
AAF77042/c
ID AAF770
XX
AC AAF770
XX
AC AAF770
XX
DT 15-MAY

AAF77042 standard;

DNA;

23

ВP

15-MAY-2001 AAF77042;

(first

entry)

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RRESULT 19
AAH759
XX AAH759
XX AAH759
XX Immuno
DT 15-NOV
XX Immuno
XX IO-MAF
PR 12-MAF
PR 10-MAF
PR 09-WAF
XX IMMUNO
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                                                                                                       Query Match
Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                             microcarrier complexes. The complexes comprise an immunostimulatory sequence (ISS), e.g. the present sequence, linked to a nonbiodegradable microcarrier provided that if the microcarrier is gold, latex or magnetic then the linkage is not biotin/avidin. The complex is useful for modulating an immune response (especially stimulating a Thi-type response or suppressing a Thi-type response), increasing interferon-gamma (especially in a patient suffering from idiopathic pulmonary fibrosis),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-MAR-2000;
09-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH75994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Immunomodulatory polynucleotide/microcarrier complexes comprise immunostimulatory sequence containing polynucleotide linked to a nonbiodegradable microcarrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-2001; 2001WO-US007843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200168143-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunomodulatory oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH75994;
                                                                                                                                                                                                                     Sequence 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to immunomodulatory polynucleotide/
microcarrier complexes. The complexes comprise an immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 18; 61pp; English
                                                                                                                                                                                                                                                                                                        increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DYNA-)
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18
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                                                                                                             17;
                                                      ω
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                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCGAACGTTCGAGATGA
                                                   GTCGAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGAACGTTCGAGATGA
GTGGAACGTTCGAGATGA
                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                        interferon-alpha
                                                                                                             Conservative
                                                                                                                                                                                                                           BP; 6 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tuck S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0188557P
2001US-00802376
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                                                                                                                                                                                                                                                                            reducing levels
                                                                                                                                       78.1%;
94.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
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                                                                                                                                                                                                                                                                              (especially in patients
els of IgE
                                                                                                                                                                 Score
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                                                                                                                                             Pred.
                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #3
                                                                                                                                                                 16.4;
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                                                                                                                                                                    BB
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                                                                                                                                                                    Length 23;
                                                                                                                   Indels
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Immunostimulatory DNA #2

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RESULT 21
AAH41575/c
ID AAH415
XX AAH415
XX AAH415
XX Immuno
XX Im
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Matches 17
                                                                                                               Tuck S,
                                                                                                                                                                                                                                                                                                                                                            15-NOV-2000; 2000WO-US031385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunostimulatory sequence; ISS; immunomodulatory; immune response; antigen; antiallergic; modulation; Th1 lymphocyte stimulation; alle Th1-associated cytokine; Th2 lymphocyte suppression; cytokine; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23 BP; 6 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modulating immune response to a second antigen in administering an immunostimulatory polynucleotide immunostimulatory sequence and a first antigen.
                                                                                                                                                                                                                                                    15-NOV-1999; 99US-0165467P.
14-NOV-2000; 2000US-00713136.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200135991-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to modulating an immune response to second antigen in an individual, involving administering to the individual an immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS) and a first antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 15; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-211136/21.
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                                                                                                                                                                                 (DYNA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       [mmunostimulatory sequence (ISS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17;
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                                                                                                                                                                                 DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCGAACGTTCGAGATGA 20
                                                                                                           Van Nest G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGAACGTTCGAGATGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78.1%;
94.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO:3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                allergy;
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Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (I) and (II) have immunomodulatory, immunosuppressive and antiallergic activities, and can be used in the modulation of immune responses via the stimulation of Th1 lymphocytes and Th1-associated cytokines, and suppression of Th2 lymphocytes and cytokines. The populations (I) and (II) of conjugate molecules may be used for modulating immune responses in individuals e.g. for the treatment of an allergic condition. (I) and (II) may be used to modulate immune responses and therefore prevent potentially harmful reactions to antigens. The present sequence represents an ISS polynucleotide which is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                     Immunostimulatory sequence; ISS; ds; antiviral; immunogen; respiratory syncytial virus; RSV; influenza virus; rhinovirus; adenovirus; measles virus; mumps virus; parainfluenza virus; rubella virus; poxvirus; parvovirus; hantavirus; varicella virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the immunological properties (e.g. the extent of antigen-specific antibody formation, including Thi-associated antibody formation) so the conjugates are used for altering the type and extent of immune response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Populations of conjugate molecules comprising polynucleotide immunostimulatory sequences polynucleotides and antigens, useful for controlling immune responses.
                                                                                                             WPI; 2001-607438/69.
                                                                                                                                                                                                          10-MAR-2000; 2000US-0188583P.
09-MAR-2001; 2001US-00802686.
                                                                                                                                                                                                                                                         12-MAR-2001; 2001WO-US007839.
                                                                                                                                                                                                                                                                                          20-SEP-2001
                                                                                                                                                                                                                                                                                                                         WO200168116-A2
                                                                                                                                                                                                                                                                                                                                                                      Respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunostimulatory sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS14666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAS14666 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SSI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 30; 97pp; English.
                                                                                                                                                                           (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes immunomodulatory populations ((I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         )) of conjugate molecules (CMs) comprising immunostimulatory sequences) of polynucleotides and antigens. The extent of conjugation affects immunological properties (e.g. the extent of antigen-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 GTCGAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGAACGTTCGAGATGA 1
                                                                                                                                                                                                                                                                                                                                                                      syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 6 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 16.4;
Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Length 23;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunostimulatory sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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Suppressing a respiratory syncytial virus infection by immunostimulatory sequence at the site of infection is and treat lower respiratory tract viral infections.

administering an useful to prevent

Disclosure; Page 15; 40pp; English

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RESULT 23
ABA03835/c
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polynucleotide comprising an immunostimulatory sequence (ISS) comprising the sequence 5'-C, G-3', where an RSV antigen is not administered. The invention is used to prevent and treat respiratory syncytial virus influenza virus, rhinovirus, adenovirus, measles virus, mumps virus, parainfluenza virus, rubella virus, poxvirus, parvovirus, hantavirus and varicella virus, A kit for carrying out the administration is also included. Unlike the prior art antiviral agent ribavirin, which is a potential teratogen, the invention provides a treatment which does not carry unacceptable side effects. Other prior art medicaments treat the symptoms only, whilst the invention treats the infection. The present sequence is an ISS of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to suppressing a respiratory syncytial virus (RSV) infection in an exposed individual, comprising administering a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunomodulatory polynucleotide/microcarrier complex; IMP/MC; IgE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABA03835;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABA03835
                                                                                                                                                                                                                                                                     10-MAR-2000; 2000US-0188303P.
09-MAR-2001; 2001US-00802359.
                                                                                                                                                                                                                                                                                                                                                                                    WO200168144-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mycobacterial disease; toxoplasmosis; schistosomiasis; chlonorchiasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hepatic fibrosis; renal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunostimulatory sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-FEB-2002
                                                                                                        New immunomodulatory polynucleotide/microcarrier complex, useful for modulating the immune response of individuals, particularly humans, of treating idiopathic pulmonary fibrosis, scleroderma, malaria or
                                                                                                                                                                                                                                                                                                                                                      20-SEP-2001
                                                                                                                                                                                                         Van Nest G,
                                                                                                                                                                                                                                                                                                                     12-MAR-2001; 2001WO-US007848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunomodulation; immunostimulation; phosphorothioate; immunomodulator; antiallergic; antibacterial; antiprotozoal; antiparasitic; hepatotropic; nephrotropic; interferon-alpha stimulator; interferon-gamma stimulator; immunoglobulin E stimulator; immune response; IPF; scleroderma; malaria; idiopathic pulmonary fibrosis; cutaneous radiation-induced fibrosis; hepatic fibrosis; renal fibrosis; infectious disease; leishmaniasis;
                                                                                             arrergres
                                                                                                                                                                                                                                        (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                           2002-049002/06.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                allergy-induced asthma; prophylactic vaccine; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGAACGTTCGAGATGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78.1%;
94.4%;
                                                           63pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISS)
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Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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microcarrier (IMP/MC) having an immurcar

esent invention describes an immunomodulatory polynucleotide/arrier (IMP/MC) complex (I), which comprises a polynucleotide an immunostimulatory sequence (ISS) linked to a biodegradable

nich comprises a polynucleotide (ISS) linked to a biodegradable

biodegradable

The present invention describes a method for reducing severity of a symptom of virus infection in an individual infected with a virus. The method comprises administering a composition consisting of a polynucleotide having an immunostimulatory sequence (ISS). The ISS comprises the sequence 5'-C,G,pyrimidine,pyrimidine,C,G-3'. An antigen administered in conjunction with the composition. ISS has viruoide activity and can be used in gene therapy. The method using the ISS can

Ď, 18 Disclosure;

Page 18;

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RESULT 24
ABA03846/c
cc is less than 10 micro m in size. (I) has immunomodulator, antiallergic, cc antibacterial, antiprotozoal, antiparasitic, hepatotropic and antiparterial activities. It can be used as an interferon (IFN)-alpha cc nephrotropic activities. It can be used as an interferon (IFN)-alpha cc stimulator, IFN-gamma stimulator or an immunoglobulin E (IgE) stimulator. (I) can be used for modulating the immune response of individuals, cc particularly humans. The IMP/MC complex is particularly useful for treating idiopathic pulmonary fibrosis (IPF), scleroderma, cutaneous treating idiopathic pulmonary fibrosis including schistosomiasis cradiation-induced fibrosis, hepatic fibrosis including schistosomiasis. Cc radiation-induced fibrosis, renal fibrosis, infectious diseases caused by cc induced hepatic fibrosis, renal fibrosis, infectious diseases caused by cc cellular pathogen (e.g. a mycobacterial disease, malaria, leishmaniasis, complasmosis, schistosomiasis or chlonorchiasis), or disorders complasmosis, schistosomiasis or chlonorchiasis), or disorders consecutation and the complasmosis or prophylactic vaccines, in individuals receiving therapeutic or prophylactic vaccines, in individuals receiving cancer, or in individuals at risk of exposure to an infectious agent. The cancer are received as the complex of the comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABA03846;
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                                                                                                                                                                                                                       Reducing severity, recurrence or duration of symptom of virus infection, or reducing viremia or blood levels of virus antigen, comprises administering a polynucleotide having an immunostimulatory sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAR-2000;
09-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-2001; 2001WO-US007840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200168077-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-FEB-2002
                                                                                                                                                                                                                                                                                                                    WPI; 2002-048999/06.
                                                                                                                                                                                                                                                                                                                                                                   Van Nest
                                                                                                                                                                             Disclosure; Page 20;
                                                                                                                                                                                                                                                                                                                                                                                                              (DYNA-) DYNAVAX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mmunomodulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mmunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
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17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              w
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence represents an ISS given in the exemplification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0188302P
2001US-00802685
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                                                                                                                                                                                                                                                                                                                                                                                                                TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence;
virucide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
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94.4%;
                                                                                                                                                                                 65pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISS;
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Pred. No. 72;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunostimulation;
therapy; viraemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         viral infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23;
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RESULT 25
AAS16339/c
ID AAS16339/c
ID AAS16339/c
AAS16339/c
AC AAS163
XX AAS163
XX IISS po
XX Herpes
KW HERPES
XW VITUCI
XX VITUCI
XX WO200)
XX WO200)
XX PP VO200)
XX IISMAN
PR 09-MA
PR 09-MA
PR 09-MA
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IISMA
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Best Local S
Matches 17
                                              The present invention relates to novel methods of treating, preventing, or reducing the severity or recurrence of a symptom of herpes simplex virus (HSV) infection in an individual who has been exposed to or who is infected with HSV. The method comprises administering a polynucleotide having an immune response. A composition containing ISS is administered without a HSV (alphaherpesvirinae) antigen. The composition can be included in a kit for ameliorating or preventing a symptom of HSV infection caused by herpes virus or preventing a symptom of HSV particularly HSV-2. Such HSV infections include chicken pox, herpes one of the ISS polynucleotides of the invention. Note: The present sequence is shown as single stranded in the specification, but the present sequence state on page 20 that this sequence may be double stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used for suppressing, ameliorating and/or preventing viral infections to an individual who may be at risk of being exposed to, exposed to or infected by a virus. It may also be used in reducing the recurrence or duration of a symptom of viral infection, delaying the development of a virus infection, and reducing viraemia or blood levels of virus antigens. The present sequence represents an ISS given in the exemplification of
     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure;
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09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISS polynucleotide
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or symptom of herpes simplex virus (HSV), e.g. HSV-2,
ring an immunostimulatory sequence to an individual.
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                                                                                                                                            kit for ameliorating or preventing a symptom of human or animal papillomavirus infection. Infections with human papillomavirus (HPV) which can be prevented or treated using the method of the invention include sexually transmitted diseases (STDs), warts, papillomas and cervical cancer. The present sequence represents one of the ISS polynucleotides of the invention. Note: The present sequence is show polynucleotides of the invention. Note: The present sequence is show the present sequence is show polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                         Treating, preventing or ameliorating papillomavirus infections, administering a composition comprising a polynucleotide having immunostimulatory sequence to the individual.
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09-MAR-2001;
                                                                                       Sequence
                                                                                                                                  polynucleotides of the invention. Note: The pesingle stranded in the specification, but the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Animal papillomavirus infection; human papillomavirus; HPV; STD; wart; sexually transmitted disease; cervical cancer; immune response;
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GTGGAACGTTCGAGATGA 1

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RESULT 27
ABA03858/c
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Matches 17
                                                                                                                                                                            polynucleotides may also be used to improve physical symptoms such as jaundice, fatigue, abdominal pain, and other clinical/ laboratory findings associated with hepatitis such as blood levels of liver enzymeter hypertension, or cirrhosis. The present sequence represents an oligonucleotide given in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Reducing viremia and blood levels of hepatitis virus antigen in an individual infected with hepatitis B virus, comprises administering a composition comprising a polynuclectide having an immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
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09-MAR-2001; 2001US-00802370
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nepatitis B virus; hepatitis C virus; virucide; anti-inflammatory;
nepatotropic; gene therapy; hepatitis infection; viraemia; jaundice;
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RESULT 29
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P-PSDB;
                                                                                                                                                                                                                                                                                                                                          capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-ABB72072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid genes from Drosophila and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila; developmental pharmaceutical; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila melanogaster expressed polynucleotide SEQ ID NO 32267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL12595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABL12595 standard; cDNA; 1017 BP
                                                                                                                                                                                                                                                                                                                      Sequence 1017 BP; 246 A; 275 C; 290 G; 206 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 32267; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Venter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAR-2000; 2000US-0191637P.
11-JUL-2000; 2000US-00614150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAR-2001; 2001WO-US009231
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2002
          Staphylococcus haemolyticus
                                                                      Prokaryotic essential gene #29328.
                                                                                                                           ACA47671;
                                                                                                                                                   ACA47671 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated nucleic acid detection
                                  arug design;
                                                                                                 19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PEKE ) PE
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DB; ABB68492.
                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                      18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JC,
                                                                                                                                                                                                                                          1 TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                   TCGTCGAGCATTCGTGATGAT 23:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORP NY.
                                                 ds;
                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry
                                    gene.
                                                                                                 (first entry)
                                             prokaryotic essential gene; cell proliferation;
                                                                                                                                                    DNA; 1020
                                                                                                                                                                                                                                                                                  85.7%;
                                                                                                                                                                                                                                                                                              77.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 biology; cell signalling;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             detection reagent for detecting 1000 or for elucidating cell signaling and cell-
                                                                                                                                                                                                                                                                      0
                                                                                                                                                     ВP
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Pred. No. 1.
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invention
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RESULT 30
ABQ14749/c
ID ABQ147
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                                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid comprising any one of CC the 6213 antisense sequences given in the specification where expression CC of the nucleic acid inhibits proliferation of a cell. Also included are: CC (1) a vector comprising a promoter operably linked to the nucleic acid CC encoding a polypeptide whose expression is inhibited by the antisense CC nucleic acid; (2) a host cell containing the vector; (3) an isolated CC polypeptide or its fragment whose expression is inhibited by the antisense CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular CC proliferation or the activity of a gene in an operon required for CC proliferation or the activity of a gene in an operon required for CC conjudent for proliferation, or that his influences the activity of the gene product or that has an activity against a biological pathway CC required for proliferation, or that inhibits cellular proliferation; (8) CC identifying a gene required for cellular proliferation or the biological pathway in which a proliferation-required gene or its gene product lies or a gene on which the test compound that inhibits proliferation of an CC compound's activity; (11) a culture comprising strains in which the gene CC product is overexpressed or underexpressed; (12) determining the extent compound that inhibits the gene product is overexpressed or underexpressed; (12) determining the extent compound that inhibits the gene compound that inhibits the gene compound that inhibits the gene compound that inhibits the compound tha
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Matches
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Wall
                                                                                                                                                                                                                                                                                                                                           K. pneumoniae or P. aeruginosa. The present sequence is one of the target prokaryotic essential genes. Note: The sequence is one of the target not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp. wido int/nih/nih/ai-j --
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06-SEP-2001; 2001US-0094893.

25-OCT-2001; 2001US-0342923P.

08-FEB-2002; 2002US-00072851.

06-MAR-2002; 2002US-0362699P.
                   ABQ14749
                                                                                                                                                                                                                                                                                             Sequence 1020
                                                                                                                                                                                                                                                                                                                                    ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 14; SEQ ID NO 35541; 1766pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-029926/02
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                                                                                                                          922
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18; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            candidate molecules for rational drug
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                   standard; DNA; 1676 BP
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Trawick JD,
                                                                                                                             TTGTGGAATGTTCGAGATGAT 942
                                                                                                                                                                TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                                                                                        351 A; 148 C; 204 G; 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Malone C,
Carr GJ,
                                                                                                                                                                                                         77.1%; Score 16.2;
85.7%; Pred. No. 1.2
Live 0; Mismatches
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                                                                                                                                                                                                                             .2e+02;
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Forsyth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              discovery programs
                                                                                                                                                                                                                                                 Length 1020;
                                                                                                                                                                                                                                                                                             U; 0 Other;
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Xu HH;
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RESULT 31
ABQ14748
ID ABQ14
XX
AC ABQ14
XX
DT 12-JU

standard; DNA; 1676

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12-JUL-2002 ABQ14748; ABQ14748

(first entry)

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                                                                                                                       CC This invention describes a novel method for determining the degree of CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a CC genomic sample of DNA. The sample is treated chemically to convert CC DNA that contains the target C is amplified to form a labeled amplicon. The amplicon is hybridised to two classes, each with at least one member, CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the degree of hybridisation to both classes is determined from the label on CC the amplicon. From the ratio of labels hybridised to the two classes of CC oligomers, the degree of methylation is calculated. The method is used: (i) for diagnosis and/or prognosis of side effects of therapeutic drugs and of a wide range of diseases, e.g. cancer, disorders of the central CC enrous, cardiovascular, gastrointestinal and respiratory systems etc., particularly by detecting mutations or single nucleotide polymorphisms CC (SNP's); and (ii) for differentiation of cell or tissue types and for cravestigating cell differentiation of cell or tissue types and for Status of many C residues to be determined simultaneously. ABQ13410-CC ABQ54121 represent genomic DNA sequences used to illustrate the method CC disclosure of the invention
                                                                        Query Match
Best Local S
                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis and prognosis, from chemically treated I
                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; 56pp + Sequence Listing; 56pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Determining the degree of cytosine diagnosis and prognosis, comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-SEP-2000;
05-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gastrointestinal; respiratory system; single SNP; cell differentiation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           drug; side effect;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-JUL-2002
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                                                                       Local
1164 TCGTTAGACGTTCGAGATGAT 1144
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                                                          l Similarity
18; Conserv
                                                                                                                     1676
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                         TCGTCGAACGTTCGAGATGAT 21
                                                        77.1%;
nilarity 85.7%;
Conservative
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2000DE-01044543
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                                                                                                                     BP;
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                                                                                                                     643 A; 513 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           central
                                                           <u>,</u>
                                                                          Score 16.2;
Pred. No. 1.
                                                                        Pred.
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                                                           Mismatches
                                                                                                                       171 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation in genomic DNA, useful for selective hybridization of amplicons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nervous system; cardiovascular;
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                                                                          .2e+02;
                                                                                          DB 6;
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                                                                                        Length 1676;
                                                           Indels
                                                                                                                         0 Other;
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RESULT 32
ABL12594
ID ABL12
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AC ABL12
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AC ABL12
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AC ABL12
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AC DT 26-MA
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DT 26-MA
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DE Drosc
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                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel method for determining the degree of CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a genomic sample of DNA. The sample is treated chemically to convert CC genomic Sample of DNA. The sample is treated chemically to convert CC DNA that contains the target C is amplified to form a labeled amplicon. The amplicon is hybridised to two classes, each with at least one member, CC of oligonuclectides and/or peptide-nucleic acid (PNA) oligoners and the degree of hybridisation to both classes is determined from the label on CC the amplicon. From the ratio of labels hybridised to the two classes of CC oligomers, the degree of methylation is calculated. The method is used: CC and of a wide range of diseases, e.g. cancer, disorders of the central CC nervous, cardiovascular, gastrointestinal and respiratory systems etc., particularly by detecting mutations or single nucleotide polymorphisms CC (SNP's); and (ii) for differentiation. The method allows the methylation convestigating cell differentiation. The method allows the methylation convestigating cell differentiation. The method allows the methylation of for tatus of many C residues to be determined simultaneously. ABQ13410-CC ABQ34121 represent genomic DNA sequences used to illustrate the method in the
                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                               Sequence 1676 BP; 349 A; 171 C; 513 G; 643 T; 0 U; 0 Other;
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05-SEP-2000; 2000DE-01044543.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; cyrosine methylation; 5'-CpG-3'; uracil; cyrosine; diagnosis; drug; side effect; cancer; central nervous system; cardiovascular; gastrointestinal; respiratory system; single nucleotide polymorphism; SNP; cell differentiation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide for detecting
               Drosophila melanogaster expressed polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-371829/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-SEP-2001; 2001WO-EP010074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                      26-MAR-2002
                                                                                                                            ABL12594
                                                                                                                                                                                                                                                                                                                                                                                                   disclosure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                   determining the degree of cytosine methylation described in the closure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nosis and prognosis, com chemically treated DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, · Piepenbrock C,
                                                                                                                                                                                                                      513
                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                      1 TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EPIGENOMICS
                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                            standard; cDNA; 3017
                                                                                                                                                                                                                    TCGTTAGACGTTCGAGATGAT 533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56pp + Sequence Listing;
                                                                                                                                                                                                                                                                                          Conservative
                                                  (first entry)
                                                                                                                                                                                                                                                                                                         77.1%;
85.7%;
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                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                           Score 16.2;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56pp; German.
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                                                                                                                                                                                                                                                                                                                            DB 6;
                  SEQ
                                                                                                                                                                                                                                                                                                                            Length 1676;
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RESULT 33
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Best Local
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21-MAR-2001;
06-SEP-2001;
25-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the eincoded proteins (ABB57737-ABB72072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3017 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signaling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Venter JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-MAR-2000; 2000US-0191637P.
11-JUL-2000; 2000US-00614150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pharmaceutical; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                      Antisense; ds; prokaryotic essential gene; cell proliferation; drug design; gene.
                                                                                                                                                                                             Prokaryotic essential gene #15617.
                                                                                                                                                                                                                                                 ACA33960;
                                                                                                                                                                                                                                                                         ACA33960 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-656860/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-2001; 2001WO-US009231
                                                    21-MAR-2002;
                                                                                                      WO200277183-A2
                                                                                                                                Enterococcus faecium
                                                                                                                                                                                                                        19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (PEKE ) PE
                                                                                                                                                                                                                                                                                                                                        1765
                                                                                                                                                                                                                                                                                                                                                                                         18;
                                                                                                                                                                                                                                                                                                                                                             1 TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                       TCGTCGAGCATTCGTGATGAT 1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 32264; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORP NY.
                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Adams M,
 2001US-00815242
2001US-00948993
2001US-0342923P
                                                                                                                                                                                                                      (first entry)
                                                    2002WO-US009107
                                                                                                                                                                                                                                                                                                                                                                                                                                         808 A; 667
                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                    77.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Į.
                                                                                                                                                                                                                                                                           3126
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                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                    Score 16.2;
Pred. No. 1.
                                                                                                                                                                                                                                                                           ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                            C; 672
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                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                            870 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                       .3e+02
                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                 Length 3017;
                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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RESULT 34
ADC91948/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC (1) a vector comprising a promoter operably linked to the nucleic acid (2) a host cell containing the vector; (3) an isolated conucleic acid; (2) a host cell containing the vector; (3) an isolated convergence or its fragment whose expression is inhibited by the antisense convergence or its fragment whose expression is inhibited by the collypeptide or its fragment whose expression is inhibited by the collypeptide; (3) producing the polypeptide; (6) inhibiting cellular containing the polypeptide; (7) identifying a compound that inhibite proliferation; (8) cellular proliferation, (8) identifying a gene required for cellular proliferation or the biological contains acts; (9) manufacturing an antibiotic; (10) profiling an organism acts; (9) manufacturing an antibiotic; (10) profiling an compound that inhibits proliferation of the strains is present in a culture or collection of the which each of the strains is present in a culture or collection of the strains; or (11) identifying the target of a compound that inhibits the containing the strain containing that inhibits the containing proteins or screening for homologous nucleic acids are useful for cellular proliferation to isolate candidate molecules for rational containing decorated for proliferation in cells other than S. aureus, S. typhimurium, CC prokaryotic essential genes. Note: The sequence is one of the target prokaryotic essential genes. Note: The sequence data for this patent did celectronic format directly from MIPO at cellular proliferation in cells other than S. aureus, S. typhimurium, CC prokaryotic essential genes. Note: The present sequence data for this patent did cellular proliferation decorated specification, but was obtained in
                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
            ds; gene; urinary tract infection; bacteraemia; endocarditis; wound;
abdominal-pelvic infection.
                                                                             E. faecium
                                                                                                                    01-JAN-2004
                                                                                                                                                                                                   ADC91948 standard; DNA; 3135 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3126 BP; 1280 A; 536 C; 627 G; 683 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-FEB-2002;
06-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         isolate candidate molecules for rational drug discovery programs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ELIT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e 6213 antisense sequences given in the specification where expression the nucleic acid inhibits proliferation of a cell. Also included are:
                                                                                                                                                                                                                                                                                                             2719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           שָׁטָ
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                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ELITRA PHARM INC
                                                                                                                                                                                                                                                                                                                                               TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zamudio C,
Trawick JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 21830; 1766pp; English.
                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-00072851.
2002US-0362699P.
                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           relates to an isolated nucleic acid comprising any one
                                                                           sequence SEQ ID 1575.
                                                                                                                                                                                                                                                                                                                                                                                                         77.1%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Malone C,
Carr GJ,
                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                            Score 16.2; DB 7;
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haselbeck R, Yamamoto R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ohlsen
Forsyth
                                                                                                                                                                                                                                                                                                                                                                                                                           Length 3126;
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Xu HH;
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AAV17086/c

ID AAV17086 standard; cDNA; 4024 BF
XX
AC AAV17086;
XX
DT 21-JUL-1998 (first entry)
XX
DT 21-bull-1998 (first entry)
XX
Tubulin folding; cofactor; alpha
XX
KW Tubulin folding; cofactor; alpha
XX
KW treatment; hyper-proliferative d
XX
OS Bos taurus.
XX
FM Key
FT CDS
192..3791
FT CDS
192..3791
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                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant vector comprising the nucleic acid operably linked to transcription regulatory element, a cell comprising the vector and a single-stranded probe comprising the nucleic acid. The nucleic acids are single-stranded probe comprising the nucleic acid. The nucleic acids are chosen from 3654 disclosed sequences encoding 3654 disclosed proteins. The nucleic acids is useful for diagnosing pathological conditions resulting from E. faecium bacterial infection (e.g. urinary tract infection, bacteraemia, endocarditis, wounds and abdominal pelvic infection) and for screening drugs such as agonists and antagonists. The nucleic acid is useful for recombinant production of Candida albicans derived peptides or antisense polypeptides. Pharmaceutical compositions and vaccines containing the nucleic acid are useful for preventing or treating Enterococcus faccium infections. The present sequence represent
                                                                                                    Tubulin folding; cofactor; alpha-tubulin; beta-tubulin; unfolded; folded; treatment; hyper-proliferative diseases; cancer; gout; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3135 BP; 1285 A; 537 C; 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequential nucleotides chosen from any of the nucleic acids, i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enterococcus faecium encoding an Enterococcus faecium polypeptide having one of 10 fully defined sequences given in the (or comprising 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JUL-1997;
14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid derived from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enterococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-799836/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Doucette-Stamm LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US6583275-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                    2725
                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the disclosed E. faecium nucleic acids
                                                                                                                                                                                                                                                                                                                                                    TCGTTAAACGTTGGAGATGAT 2705
                                                                                                                                                                                                                                                                                                                                                                                   TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid derived from Enterococcus faecium encoding a faecium polypeptide useful for detection, prevention and a pathological condition resulting from a bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0051571P
98US-0085598P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00107532
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                                                                                                                                                                                                                                                                                                                                                                                                                                   77.1%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1575;
                                                                                                                                                          cofactor D gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 16.2; I
Pred. No. 1.36
0; Mismatches
                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G; 685 T;
                                                                                                                                                                                                                                                                                                                                                                                                               1.3e+02;
3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3135;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
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Location/Qualifiers

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RESULT 36
ADB88936
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is that encoding bovine tubulin-folding cofactor D which may be useful as a target for interfering with the production of productively folded alpha- and beta-tubulins. Since tubulin function is essential for cell division and proliferation, agents which interfere with tubulin function can serve as useful antiproliferative compounds. Such interfering agents have potential utility as agents for the treatment of hyperproliferative diseases such as cancer and the treatment of gout
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated cofactor(s) for tubulin folding - a identifying agents which interfere with folding -proliferative diseases such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-130618/12
P-PSDB; AAW47206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUL-1997;
                                                                                                                                                                                                      chimeric immunomodulatory compound; CIC; immunomodulatory activit spacer moiety; linear hexaethylene glycol structure; HBG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IF IFN-alpha; idiopathic pulmonary fibrosis; viral infection; amelio immunoglobulin E; IgE; allergy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4024 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 57-61; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9804587-A1
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                                                 21-JUN-2001;
23-APR-2002;
                                                                                                                                                                                                                                                                                                                                                            ADB88936 standard; DNA;
Fearon
                                                                                       21-JUN-2002; 2002WO-US020025
                                                                                                                03-JAN-2003
                                                                                                                                          WO2003000922-A2
                                                                                                                                                                   Synthetic
                                                                                                                                                                                           stimulating
                                                                                                                                                                                                                                                                                   Chimeric immunomodulatory compound DNA sequence,
                       (DYNA-)
                                                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18;
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ŗ
                         DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTCGAACCTTGGAGATGAT 537
                                                                                                                                                                                            cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
Dina
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                                                 2001US-0299883P
2002US-0375253P
                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product= "bovine tubulin-folding cofactor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YORK STATE
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              752 A; 1209 C; 1266 G; 797 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77.1%;
85.7%;
                                                                                                                                                                                           immune system cell; ss.
                                                                                                                                                                                                                                                                                                                                                              66
                                                                                                                                                                                                                                                                                                                                                              ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.2;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .3e+02;
                                                                                                                                                                                                                                                           immunomodulatory activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
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    are useful as targets for
ing in the treatment of hyper

                                                                                                                                                                                                                                                                                    SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 4024;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ā
                                                                                                                                                                                                                    se; IFN-gamma;
ameliorating;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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Chaving immunomodulatory activity, comprising two or more nucleic acid cone non-nucleic acid spacer moieties, where at least cone non-nucleic acid spacer moieties, where at least cone non-nucleic acid spacer moieties, where at least cone nucleic acid moieties, where the spacer is not a polypeptide, and at least one concludatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (REG) subunits. CC CIC's are useful for modulating an immune response in an individual, contain the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-calpha; in an individual, where the individual has idiopathic pulmonary compound of an infectious disease, or an immunoglobulin E (IgE)-related consorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-210159/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a novel chimeric immunomodulatory compound (CIC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chimeric immunomodulatory compound having immunomodulatory ity, useful for modulating an immune response and for treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224pp; English.
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Query Match Best Local S Matches 16 Sequence 66 BP; 18 A; 9 76.2%; Ç 21 G; Score 16; DB; Pred. No. 1.3 18 Ţ, 0 DB 8; Le 1.3e+02; Ţ. 0 Other; Length 66

16;

Conservative

0;

Indels

0

Gaps

0

Similarity

100.0%;

RESULT 37 ABQ75223 ID ABQ75 05-NOV-2002 ABQ75223 standard; ISS immunomodulatory oligonucleotide SEQ ID NO:58. (first entry) DNA; 19 뫈

malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic; virucide; antibacterial; protozoacide; ss. allergy; asthma; infectious disease; idiopathic pulmonary fibrosis; viral Immunostimulatory sequence; ISS: immunomodulatory; immune response; interferon-gamma; IFN-gamma; infection; mycobacterial dis disease;

Synthetic

WO200252002-A2

04-JUL-2002

27-DEC-2001; 2001WO-US050821

2000US-0258675P

(DYNA-) DYNAVAX TECHNOLOGIES CORP

Fearon KL,

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CC biodegradable MC, where the MC is less than 10 micrometre in size; and CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide, CC antibacterial and protozoacide activities, and can be used as a modulator CC of immune response. (1) is useful for modulating an immune response in an CC individual suffering from disorders associated with a Th2-type immune CC response, especially an allergy or asthma, or an infectious disease. (1) CC is also useful for increasing interferon-gamma (IFN-gamma) in an CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an CC individual having a viral infection. (1) is further useful for CC ameliorating a symptom of an infectious disease caused by a cellular CC pathogen such as mycobacterial disease, malaria, leishmaniasis, CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an CC present sequence represents an immunomodulatory oligonucleotide from the CC present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 38
ADB88893
Y PROPERTY OF A CONTRACT OF A 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy: allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer;
                                                                                                                                                                                                             21-JUN-2001;
23-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprising an immunostimulatory sequence (ISS). Also described: (1) immunomodulatory composition comprising (1); (2) an immunomodulatory polynuclectide/microcarrier (IMP/MC) complex, comprising (I) linked to polynuclectide/microcarrier (IMP/MC) complex, comprising (I) linked to polynuclectide/microcarrier (IMP/MC) complex, comprising (I) linked to polynuclectide (IMP/MC) complex, comprising (I) linked to polynuclectide (IMP/MC) complex, comprising (I) linked to polynuclectide (IMP/MC) complex (IMP/MC) complex (IMP/MC) comprising (IMP/MC) co
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric immunomodulatory compound DNA sequence, SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 22; 95pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunomodulatory polynucleotide for modulating an immune response in subject suffering from disorders associated with Th2-type immune
                                         Fearon KL,
                                                                                                                           (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                  21-JUN-2002; 2002WO-US020025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADB88893 standard; DNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-657426/70
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                                    Dina
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2002US-0375253P.
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89.5%;
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                                    Tuck SF
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1.5e+02;
2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE) related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polymucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunodulatory compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moietles and one or more non-nucleic acid spacer moietles, where at least one non-nucleic acid spacer moietly is covalently joined to two nucleic acid moietles, where the spacer is not a polypeptide, and at least one nucleic acid moietly comprises the sequence 5'-CG-3'. The chimeric immunodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type
                                                                                             WPI; 2001-656860/75
                                                                                                                                                                                                                                                                             23-MAR-2000;
11-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pharmaceutical; gene;
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                                                                P-PSDB; ABB65338
                                                                                                                                                      Venter JC,
                                                                                                                                                                                                                                                                                                                                                                       23-MAR-2001; 2001WO-US009231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200171042-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila; developmental biology; cell signalling; insecticide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drosophila melanogaster expressed polynucleotide SEQ ID NO 22805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABL09441 standard; cDNA; 2726
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17; Conserv
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                                                                                                                                                      Adams M,
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2000US-00614150.
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                                                                                                                                                          PWD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ed. No. 1.5e+02;
Mismatches 2;
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New isolated nucleic acid detection reagent for detecting 1000 or

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AC Drosop
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Matches 17
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The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL06176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABL01840-ABL16175) and the sequence in the sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster
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pharmaceutical; gene; ss.
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                                                                                                                                                                                                                                      New isolated nucleic acid genes from Drosophila and
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11-JUL-2000; 2000US-00614150
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1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*

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equence 5181	e 96,	e 96, App	e 58,	Φ	O	O	Ø	æ	Φ	æ	tb	,,,	10		10	ö	ω	3, Appl	Sequence 3, Appli	ω	3, Ag	e 36,	e 36,	e 14, App	e 45,	e 45,	e 23,	Sequence 95, Appl	4, App

ALIGNMENTS

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TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800
CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 132
LENGTH: 21
TYPE: DNA
US-09-927-422A-16

; Sequence 16, Application US/09927422A
; Publication No. US20030022852A1
; GENERAL INFORMATION:
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Sequence 132, Application US/10033243
Publication No. US20030049266A1
GENERAL INFORMATION:
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Best Local Similarity
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APPLICANT: Van Nest,

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Best Local S
Matches 19
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PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
SOFTWARE: FASUSEQ for Windows Version 4.0
SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19, Application US/10033243 Publication No. US20030049266A1 GENERAL INFORMATION:
                                                           GENERAL INFORMATION:
                                                                         Sequence 41, Application US/10176883
Publication No. US20030175731A1
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
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PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: U.S. 60/188,30
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
TITLE OF INVENTION: METHODS OF USING THE SAME
FILE REFERENCE: 377882001800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/927,422A CURRENT FILING DATE: 2001-08-10
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TITLE OF INVENTION: FORMULATIONS AND METHODS FOR USE THEREOF
FILE REFERENCE: 377882001420
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                                                                                                                                      RESULT 6
US-10-033-243-30
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Sequence 30, Application US/10033243

Publication No. US20030049266A1

GENERAL INFORMATION:
APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
TITLE OF INVENTION: METHODS OF USING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 41
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Best Local :
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APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
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PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
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APPLICANT: Dina, I
APPLICANT: Tuck, S
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PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version 4.0
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CURRENT FILING DATE: 2002-06-21
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TYPE: DNA
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                                                                                                                                                                                                                                                                                                                        Local Similarity
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0; Mismatches
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LENGTH: 22
TYPE: DNA
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LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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Best Local (
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Best Local Similarity
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CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
SOFTWARE: FABUSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
                              TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-II FILE REFERENCE: 377882002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-I FILE REFERENCE: 377882002000
                                                                                         APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Fearon, APPLICANT: Dina, APPLICANT: Tuck,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
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Tuck, Stephen
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CATION NUMBER: US/10/177,826
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                                                                                                                                                                                                                                                                                                                                                                                         90.5%; Score 19; DB 14; Length 22; 100.0%; Pred. No. 3.9;
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US-10-176-883-46
Sequence 46, Application US/10176883
Publication No. US20030175731A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 24
LENGTH: 19
                                                                                                                                           GENERAL INFORMATION:
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Publication No. US20030049266A1
GENERAL INFORMATION:
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Best Local Similarity
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LENGTH: 22
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
CURRENT APPLICATION NUMBER: US/10/176,883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
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PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: FEARON, Karen L. APPLICANT: DINA, Dino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Polynucleotide containing FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: n = 5-bromocytosine
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100.0%; Pred. No.
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94.7%;
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Pred. No. 13;
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PRIOR APPLICATION NUMBER: 60/299,883

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RESULT 11
US-10-177-826-46
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                                                                    RESULT 12
US-10-033-243-56
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              Sequence 56, Application US/10033243 Publication No. US20030049266A1 GENERAL INFORMATION:
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Best Local Similarity
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Best Local (
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Publication No.
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CURRENT APPLICATION NUMBER: US/10/177,826

CURRENT FILING DATE: 2002-06-21

PRIOR APPLICATION NUMBER: 60/299,883

PRIOR FILING DATE: 2001-06-21

PRIOR APPLICATION NUMBER: 60/375,253

PRIOR APPLICATION NUMBER: 60/375,253

PRIOR FILING DATE: 2002-04-23

NUMBER OF SEQ ID NOS: 141

SOFTWARE: FastSEQ for Windows Version 4.0
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PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
APPLICANT: FEARON,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                        NAME/KEY: variation LOCATION: 5
                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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No. US20030199466A1
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                                                                                                                                                                                                                Score 18; DB
Pred. No. 13;
0; Mismatches
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Pred. No.
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                                                                                                                                                                                                                                   DB 14; Length 19; 13;
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US-10-033-243-57; Sequence 57, Application US/10033243; Publication No. US20030049266A1
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                                                                                                                                           Sequence 94, Application US/10176883 Publication No. US20030175731A1 GENERAL INFORMATION:
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Matches
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APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino
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CURRENT APPLICATION NUMBER: US/10/033,243

CURRENT FILING DATE: 2002-04-03

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR FILING DATE: 2000-12-27
           APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
CURRENT APPLICATION NUMBER: US/10/176,883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800
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CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE: OTHER INFORMATION: Polynucleotide containing CG
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mes 18; Conserv
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94.7%;
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94.7%; Pred. No. 26
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60/299,883

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RESULT 16
US-10-177-826-94
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                                                                                                                                                          Sequence 94, Applica Publication No. US20 GENERAL INFORMATION:
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Publication No.
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Best Local Similarity
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FABUSEQ for Windows Version 4.0
                                                 TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-II FILE REFERENCE: 377882002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/299,883 PRIOR FILING DATE: 2001-06-21
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PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
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PRIOR FILING DATE: 2001-06-21
                                                                                                      APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
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TYPE: DNA
ORGANISM: Artificial Sequence
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TYPE: DNA
ORGANISM: Artificial Sequence
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18; Conserv
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Tuck, Stephen
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10. US20030199466A1
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94.7%;
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Pred. No. 26
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Pred. No. 26;
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US-10-033-243-23
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US-10-177-826-95
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LENGTH: 19
                                                                                                                                                                                     Sequence 23, Application US/10033243
Publication No. US20030049266A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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Publication No.
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Best Local Similarity 94.7%;
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                                                     APPLICANT: FEARON, KAYEN L.

APPLICANT: DINA, DING
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES.
TITLE OF INVENTION: METHODS OF USING THE SAME
FILE REFERENCE: 377882001800
CURRENT APPLICATION UNUMER: US/10/033,243
CURRENT FILING DATE: 2002.04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
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APPLICANT: Dina, I
APPLICANT: Tuck,
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PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
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CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
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TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2002-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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94.7%;
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Pred. No. 26
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Pred. No. 26
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US-10-177-826-45
; Sequence 45, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
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Best Local S
Matches 17
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NAME/KEY: misc feature
LOCATION: 2, 5
OTHER INFORMATION: n = 5-bromocytocine
3-10-033-243-23
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Best Local
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CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-I
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OTHER INFORMATION: n = 5-bromocytosine
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No. US20030175731A1
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Pred. No.
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Pred. No.
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CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 45
LENGTH: 19
                                                                                                                    RESULT 22
US-10-176-883-36
; Sequence 36, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
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US-10-033-243-14
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR APPLICATION STANDARD CONTROL OF SEQ ID NOS: 133
APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
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NAME/KEY: variation
LOCATION: 2, 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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Similarity 94.4%;
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Pred. No.
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Pred. No. 8
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RESULT 24
US-09-802-686-3/c
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                       Sequence 3, Application US/09802686
Patent No. US20010046967A1
GENERAL INFORMATION:
APPLICANT: Dynavax Technologies Corporation
APPLICANT: Van Nest, Gary
TITLE OF INVENTION: METHODS OF PREVENTING AND TRE
TITLE OF INVENTION: RESPIRATORY VIRAL INFECTION
TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 36 LENGTH: 18
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SEQ ID NO 36
LENGTH: 18
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Best Local 9
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CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
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APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
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PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
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CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
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PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
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NUMBER: US/09/802,686
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Pred. No. 87
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Query Match
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US-09-802-685-3/c
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SEQ ID NO 3
LENGTH: 23
TYPE: DNA
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APPLICANT: Van Nest, Gary
APPLICANT: Eiden, JOSeph J., Jr.
TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING VIRAL
TITLE OF INVENTION: INFECTIONS USING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
FILE REFERENCE: 377882001600
CURRENT FILING DATE: 2001-03-09
ERIOR APPLICATION NUMBER: U.S. 60/188,302
PRIOR APPLICATION NUMBER: U.S. 60/188,302
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 23
TYPE: CANNEL THE METHOD TO THE
                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09802376 Patent No. US20020055477A1 GENERAL INFORMATION:
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Matches :
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                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/802,376
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,557
PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                                                                                  APPLICANT: Van Nest, Gary
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS
FILE REFERENCE: 37788201770
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PRIOR APPLICATION NUMBER: 60/188,583
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 10
                                                                                           NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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Pred. No. 8
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Pred. No. 88;
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                                                   ; OTHER INFORMATION: Polynucleotide containing US-09-802-445-3
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 23
                                                                                                                                                  NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
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Query Match
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CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,301
PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                     FILE REFERENCE: 377882001300
CURRENT APPLICATION NUMBER: US/09/802,445
CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,265
PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                                                                                                       APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: METHODS OF REDUCING PAPILLOMAVIRUS INFECTION USING IMMUNOMODULATG
TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCES
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APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: INFECTION USING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
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                                                                                                                      TYPE: DNA
                                                                                                                                    ENGTH: 23
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Pred. No. 88;
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Pred. No. 88;
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TITLE OF INVENTION: INMUNOMODULATORY FORMULATIONS AND TITLE OF INVENTION: METHODS FOR USE THEREOF FILE REFERENCE: 377882001720

CURRENT APPLICATION NUMBER: US/09/927,884

CURRENT FILING DATE: 2001-08-10

PRIOR APPLICATION NUMBER: U.S. 09/802,376

PRIOR FILING DATE: 2001-03-09

PRIOR FILING DATE: 2001-03-09

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEO ID NOS: 14
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SEQ ID NO 3
LENGTH: 23
TYPE: DNA
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Best Local Similarity 94.4
Matches 17; Conservative
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                                                                                                                                           SEQ ID NO 3
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Query Match
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CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: U.S. 09/802,359
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: U.S. 60/188,30
PRIOR APPLICATION NUMBER: U.S. 60/188,30
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY TITLE OF INVENTION: FORMULATIONS AND METHODS FOR FILE REFERENCE: 377882001420
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                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0
                                                                              LENGTH: 23
TYPE: DNA
ORGANISM: Artificial Sequence
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OTHER INFORMATION: Polynucleotide containing
                                                    OTHER INFORMATION: Polynucleotide containing
                                                                        FEATURE:
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Dina, Dino
                                                                                                                                                                                                                                                                                                                                                            Tuck, Stephen
Fearon, Karen L.
Dina, Dino
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Pred. No. 88;
 Score 16.4;
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 DB 10;
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78.1%;

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APPLICANT: Van Nest, Gary
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS AND
FILE REFERENCE: 37788201400
CURRENT PEPLICATION NUMBER: US/09/802,359
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,303
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 23
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
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US-10-357-760-3/c
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                                                               Query Match
Best Local S
Matches 17
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Publication No. US20030129251A1
GENERAL INFORMATION:
                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/802,370
PRIOR FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,301
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 3
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Best Local
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APPLICANT: Eiden, Joseph J. Jr.
APPLICANT: METHODS OF SUPPRESSING HEPATITIS VIRUS
TITLE OF INVENTION: INFECTION SING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
FILE REFERENCE: 377882001200
CURRENT APPLICATION NUMBER: US/10/357,760
CURRENT FILING DATE: 2003-02-03
                                                                                                                                                                                           LENGTH: 23
TYPE: DNA
                                                                                                                                           OTHER INFORMATION: Polynucleotide containing
                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
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17; Conserv
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                              GTCGAACGTTCGAGATGA 20
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94.4%;
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US-10-426-237-3
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US-10-413-504-4/c
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LENGTH: 23
TYPE: DNA
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SEQ ID NO 3
LENGTH: 23
TYPE: DNA
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APPLICANT: Dynavax Technologies Corporation
APPLICANT: Van Nest, Gary
                                        Matches
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Publication No. US20040009942A1
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                                                            Best Local Similarity
                                                                           Query Match
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TITLE OF INVENTION: COMPOSITIONS THEREOF AND METHODS OF USE THEREOF
FILE REFERENCE 37788-2004.01
CURRENT APPLICATION NUMBER: US/10/413,504
CURRENT FILING DATE: 2003-04-11
PRIOR APPLICATION NUMBER: US 09/296,477
PRIOR FILING DATE: 1999-04-22
PRIOR FILING DATE: 1999-04-22
PRIOR APPLICATION NUMBER: US 09/092,329
PRIOR FILING DATE: 1998-06-05
NUMBER OF SEQ 1D NOS: 21
NUMBER OF SEQ 1D NOS: 21
NUMBER: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/426,237
CURRENT FILING DATE: 2003-04-29
PRIOR APPLICATION NUMBER: 09/802,686
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,583
PRIOR FILING DATE: 2000-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Van Nest, Gary
TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING
TITLE OF INVENTION: RESPIRATORY VIRAL INFECTION USING
TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCES
FILE REFERENCE: 377882000920
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APPLICANT: Schwartz, David
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                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 10
                                                                                                                                         OTHER INFORMATION: Polynucleotide containing
                                                                                                                                                            ORGANISM: Artificial Sequence FEATURE:
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GTCGAACGTTCGAGATGA 20
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                                                         78.1%;
94.4%;
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94.4%;
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                                                         Score 16.4;
Pred. No. 88;
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Pred. No. 88;
                                        Mismatches
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RESULT 35
US-10-424-599-21073/c
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APPLICANT: Cao Yongwei
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5323)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 21073
LENGTH: 450
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Best Local Similarity
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APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
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APPLICANT:
APPLICANT:
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PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Identification of Essential Genes in Microorganisms FILE REFERENCE: ELITEA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20
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ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                       APPLICATION NUMBER: 60/253,625
FILING DATE: 2000-11-27
                                                                                               APPLICATION NUMBER: 60/242,578 FILING DATE: 2000-10-23
                                                                                                                                         APPLICATION NUMBER: 60/230,347 FILING DATE: 2000-09-09
                                                                                                                                                                                                     APPLICATION NUMBER: 60/230,335
                FILING DATE:
                                    APPLICATION NUMBER: 60/257,931
                                                                                                                                                                                    FILING DATE: 2000-09-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373 TCGAATGTTCGAGATGAT 356
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zamudio, Carlo
Malone, Cheryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ohlsen, Kari
Zyskind, Judith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yamamoto,
                                                                                                                                                                                                                                                                                                                                                                                                                                              Forsyth, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Trawick, John
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Grant
To, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Liangsu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Daniel
NUMBER: 60/267,636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     78.1%;
94.4%;
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Pred. No. 1.1e+02;
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RESULT 37
US-10-282-122A-21830/c
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                                                                                  US-10-282-122A-21830
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PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 78614
SOFTWARE: Patentin version 3.1
SEQ ID NO 35541
LENGTH: 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
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SEQ ID NO 21830
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                 Query Match
Best Local Similarity
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PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                         Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 78614
                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Identification of Essential FILE REFERENCE: ELITRA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                     ORGANISM: Enterococcus faecium
                                                                                                                           TYPE: DNA
                                                                                                                                              LENGTH: 3126
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FILING DATE: 2000-10-23
APPLICATION NUMBER: 60/253,625
FILING DATE: 2000-11-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 2000-09-06
APPLICATION NUMBER: 60/230,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2000-09-09
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                                                                                                                                                                                        PatentIn
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Forsyth, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zyskind, Judith
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Trawick, John
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77.1%; Score 16.2; I
85.7%; Pred. No. 1.5e
tive 0; Mismatches
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                                         DB 12;
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APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 28340
LENGTH: 3999
TYPE: DNA
ORGANISM: Glycine max
FEATURE:
OTHER
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                                                                                                                                                      ; OTHER INFORMATION: Synthetic construct US-10-176-883-139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: PAT_MRT3847_125592C.1 US-10-424-599-28340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-424-599-28340/c
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                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 139, Application US/10176883 Publication No. US20030175731A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 77.1%;
Best Local Similarity 85.7%;
Matches 18; Conservative
                                                                                             Query Match
Best Local Similarity
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                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/299,883 PRIOR FILING DATE: 2001-06-21
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                                                                                                                                                                                                              LENGTH: 66
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                              FEATURE:
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GAACGTTCGAGATGAT 23
                                       GAACGTTCGAGATGAT 21
                                                                              Conservative
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                                                                          76.2%; Score 16; DB 14; L
100.0%; Pred. No. 1.5e+02;
. Mismatches 0;
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Pred. No. 1.6e+02;
0; Mismatches 3;
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PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 139
LENGTH: 66
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Search completed: April 6, 2004, 04:04:03
Job time : 346 secs
                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Synthetic construct US-10-177-826-139
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US-10-177-826-139
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                                                                                                                                                                 Query Match 76.2%; S
Best Local Similarity 100.0%;
Matches 16; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-II
                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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Perfect score:
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of hits satisfying chosen parameters:
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Match Length
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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/Dackfiles1.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*
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                  US-09-296-477-4
US-08-776-251-10
US-08-776-251-10
US-08-776-251-10
US-09-134-000C-2551
US-09-134-001C-1108
US-09-134-001C-1108
US-10-204-708-4
US-09-335-742-19
US-09-347-343-32
US-09-820-484-3
US-09-820-484-3
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US-09-296-477-2
US-09-296-477-1
US-09-296-477-1
US-09-296-477-5
US-09-296-477-8
US-09-296-477-8
US-09-296-477-8
US-09-378-1566
US-09-378-1566
US-09-252-991A-2256
US-08-466-794A-5
US-08-621-976-12664
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Sequence 11, Appl
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Sequence 1108, Ap
Sequence 1, Appl
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13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	14	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	66.7	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
531	459	321	223	173	86	86	66	66	22	4411529	4403765	50937	14636	4715	1535	77	77
4.	4.	w	4.	4	N	N	N	N	4	ω	ω	w	w	4.	4.	N	ب
US-09-134-000C-1500	US-09-540-236-1391	US-09-240-274-197	US-08-956-171E-1271	US-09-313-294A-3045	US-08-485-885-64	US-08-710-134-64	US-08-485-885-63	US-08-710-134-63	US-09-296-477-15	US-09-103-840A-1	US-09-103-840A-2	US-09-428-517-1	US-09-173-914-6	US-08-956-171E-203	US-09-848-295-1	US-08-233-012C-36	US-08-447-169A-36
Sequence 1500, Ap	Sequence 1391, Ap	Sequence 197, App	Sequence 1271, Ap	Sequence 3045, Ap	Sequence 64, Appl	Sequence 64, Appl	Sequence 63, Appl	Sequence 63, Appl	•	Sequence 1, Appli	Sequence 2, Appli	Sequence 1, Appli	Sequence 6, Appli	Sequence 203, App	Sequence 1, Appli	Sequence 36, Appl	Sequence 36, Appl

ALIGNMENTS

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RESULT 2
US-09-107-532A-1575/c
; Sequence 1575, Application US/0910/32...
; Sequence 1575, Application US/0910/32...
; Patent No. 6583275
; GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: ENTEROCOCCUS FABCIUM FOR DIAGNOSTICS AND THERAPBUTICS
TOTIFICES: 7310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: RAZ, E.
APPLICANT: ROMAN, M.
APPLICANT: DINA, D.
TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGONU
TITLE OF INVENTION: COMPOSITIONS THEREOF AND
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 377882000420
CUURRENT APPLICATION NUMBER: US/09/296,477A
CUURRENT FILING DATE: 1999-04-22
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER FILING DATE: 1998-06-05
BARLIER FILING DATE: 1998-06-05
SARLIER FILING DATE: 1997-06-06
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 23
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Synthetic US-09-296-477-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/09296477A Patent No. 6589940
                                                                                                                                                                                                                                                                                                                                          18 GTGGAACGTTCGAGATGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMUNOSTIMULATORY OLIGONUCLEOTIDES, COMPOSITIONS THEREOF AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                 78.1%;
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CITY: Waltham STATE: Massachusetts

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NAME/KEY: misc feature;
LOCATION: (B) LOCATION 1...3135;
SEQUENCE DESCRIPTION: SEQ ID NO: 1575;
US-09-107-532A-1575
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                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-776-251-10
                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local (
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/776,251
                                                                                                                                                                                                                                                                         APPLICANT: Springer, Caroline of APPLICANT: Marais, Richard FITLE OF INVENTION: Surface expression
                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
TELEPAX: (781)893-8277
                                                                                                                                                COUNTRY:
                                                                                                                                                                                      CITY: Arlington
                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Type: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE Type: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/107,532A FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2725 TCGTTAAACGTTGGAGATGAT 2705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL: NO ANTI-SENSE: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/085,598 FILING DATE: 14 May 1998 APPLICATION NUMBER: 60/051571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: <Unknown>
                                                                                                                                                             Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 3135 base pairs
                                                                                                                                                                                                         E: Nixon & Vanderhye
1100 No. 6025340th Glebe Road, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77.1%;
85.7%;
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Pred. No. 13;
0; Mismatches
                                                                                                                                                                                                                                                                                          of enzyme in gene directed prodrug therapy
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                                            (EPO)
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US-08-776-251-10/c
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; MOLECULE TYPE:
US-08-776-251-10
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FILING DATE: 27-JUL-1995
FRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9411
FILING DATE: 27-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAMB: Arthur R. Crawford
REGISTRATION NUMBER: 25,32
REFERENCE/DOCKET NUMBER: 65,32
REFERENCE/DOCKET NUMBER: 61
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
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Best Local (
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Patent No. 6
             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                           NAME: Arthur R. Crawford
REGISTRATION NUMBER: 25,7
REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 10
                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, \
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/776,251
PILING DATE: 31-DAN-1997
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                  FILING DATE: 27-JUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/GB95/017
FILING DATE: 27-JUL-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9415167.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: LIC.
CITY: Arlington
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Marais, Richard
TITLE OF INVENTION: Surfac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                     LENGTH: 816 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  816 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Nixon & Vanderhye
1100 No. 6025340th Glebe Road, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                PatentIn Release #1.0, Version #1.25 (EPO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Springer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73.3%;
                73.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Surface expression of enzyme in gene directed prodrug therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Caroline J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GB 9415167.7
                                                                                                                                                                                                                                                                                                                                                           PCT/GB95/01782
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Score 15.4; Di
Pred. No. 31;
O; Mismatches
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Pred. No. 3
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                                 Length 816;
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Matches

Conservative

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Indels

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630 TCGAACGTTCGAGACGA 614

TCGAACGTTCGAGATGA 20

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RESULT 7
US-09-134-001C-1108/c
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; LOCATION: (134)...(1774)
US-09-555-000-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
US-09-555-000-1/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                                                                                                                         US-09-134-000C-2551
Sequence 1108, Application US/09134001C Patent No. 6380370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09555000 Patent No. 6489108
                                                                                                                                                                                                                                                                                                           SEQ ID NO 2551
LENGTH: 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 73.3%;
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2551, Application US/09134000C Patent No. 6617156
                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Genencor International, Inc.
TITLE OF INVENTION: Proteases from Gram Positive Organisms
FILE REFERENCE: GG390-PCT
CURRENT APPLICATION NUMBER: US/09/555,000
CURRENT FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: PCT/US98/26971
PRIOR APPLICATION NUMBER: PCT/US98/26971
PRIOR FILING DATE: 1998-12-17
NUMBER OF SEQ. ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO TITLE OF INVENTION: ENTERCOCCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-032
CURRENT APPLICATION NUMBER: US/09/134,000C
CURRENT FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE:
                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 6812
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/055,778 PRIOR FILING DATE: 1997-08-15
                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Enterococcus faecalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: 1900
TYPE: N: Bacillus subtilis
ORGANISM: Bacillus subtilis
FEATURE:
                                                                                                                                                                               Local Similarity 85.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1119 CGAACGTTCGACATGAT 1103
                                                                                                          μ
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                                                                                                                                 TCGTCGAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAACGTTCGAGATGAT 21
                                                                                                        TCGTCGAAGGTTCCTGATGA 50
                                                                                                                                                                                                  72.4%;
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Pred. No. 34
                                                                                                                                                                                                  Score 15.2;
Pred. No. 3
                                                                                                                                                                               Mismatches
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US-09-235-742-19
Sequence 19, Application US/09235742
Patent NO. 6498148
GENERAL INFORMATION:

RESULT 9

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APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Dyagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Dyagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Dyagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Dyagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Dyagnosis of Diseases Associated with DNA
TITLE OF INVENTION: UNMBER: US/10/204,708
CURRENT FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: DETOTED 1/03971
PRIOR APPLICATION NUMBER: DETOTED 1/03971
PRIOR APPLICATION NUMBER: DETOTED 1/03978
PRIOR APPLICATION NUMBER: DETOTE 1/0
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Best Local Similarity
Watches 17; Conserva
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; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-1108
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SEQ ID NO 4
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LENGTH: 4590
                                                                                                                                Query Match
Best Local Similarity
Matches 17; Conserv
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TITLE OF INVENTION: NUCLEIC ACID AND DAMINO ACID SEQUENCES RELATING
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC-007
CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR PILING DATE: 1997-11-08
PRIOR PILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
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                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 10619
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                         OTHER INFORMATION:
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9684 CGTAGAATGTTCGTGATGAT 9703
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Pred. No. 50;
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Pred. No. 55;
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; OTHER INFORMATION: Recombinant or Synthetic Sequence
US-09-235-742-19
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; ORGANISM: synthetic oligonucleotide
US-09-347-343-32
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EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 08/593,554
EARLIER FILING DATE: 1996-01-30
EARLIER APPLICATION NUMBER: 08/725,968
EARLIER FILING DATE: 1996-10-04
EARLIER APPLICATION NUMBER: 06/028,118
EARLIER FILING DATE: 1996-10-11
NUMBER OF SEQ ID NOS: 20
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CURRENT APPLICATION NUMBER: US/09/347,343A
CURRENT FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 32
LENGTH: 22
GENERAL INFORMATION:
APPLICANT: Raz, Eyal
APPLICANT: Cho, Hearn Jay
APPLICANT: Richman, Douglas
APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic
TITLE OF INVENTION: Lymphocyte Response in vivo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 19
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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APPLICANT: RAZ, Eyal R.
APPLICANT: KOBAYASHI, Hiroko
APPLICANT: KOBAYASHI, Hiroko
TITLE OF INVENTION: METHOD FOR ENHANCING AN IMMUNE RESPONSE
                                                                                                                                          Sequence 1, Applica Patent No. 6534062
                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local Similarity
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/235,742
CURRENT FILING DATE: 1999-01-21
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TITLE OF INVENTION: Antigen-St
TITLE OF INVENTION: Shifting t
TITLE OF INVENTION: Phenotype
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                                                                                                                                                                                                                                                                                                        6 GAACGTTCGAGATGA 20
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FILE REFERENCE: 06510-188US1
CURRENT APPLICATION NUMBER: US/09/820,484
CURRENT FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR FILING DATE: 2000-03-28
PRIOR APPLICATION NUMBER: US 60/203,567
PRIOR FILING DATE: 2000-05-11
PRIOR PILING DATE: 2000-05-11
PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
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                                                                                                    ; OTHER INFORMATION: phosphorothicate ISS-ODN US-09-820-484-3
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US-09-820-484-3
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SEQ ID NO 3
LENGTH: 22
                                                                         Query Match
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                 FEATURE:
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                                                                                                                                                        TYPE: DNA
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RESULT 13 US-09-774-403A-1

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RESULT 15
US-09-296-477-2
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SEO ID NO 1
ENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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SOPTWARE: FRANCSCO for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Immunomodulatory sequence
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Best Local :
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APPLICANT:
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CURRENT FILING DATE: 1999-04-22
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER FILING DATE: 1998-06-05
EARLIER FILING DATE: 1998-06-06
EARLIER FILING DATE: 1997-06-06
NUMBER: 09/048,793
EARLIER FILING DATE: 1997-06-06
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: ROMAN, M.
APPLICANT: DINA, D.
APPLICANT: DINA, D.
TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGONUCLEOTIDES,
TITLE OF INVENTION: COMPOSITIONS THEREOF AND METHODS OF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 377882000420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: UCAL166
CURRENT APPLICATION NUMBER: US/09/774,403A
CURRENT FILING DATE: 2002-04-15
PRIOR APPLICATION NUMBER: 60/179,353
PRIOR FILING DATE: 2000-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: RAZ, E. APPLICANT: SCHWART
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                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                             Local Similarity
les 15; Conserv
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Dennis Carson
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GAACGTTCGAGATGA

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APPLICANT: RAZ, E.

APPLICANT: SCHWARTZ, D.

APPLICANT: SCHWARTZ, D.

APPLICANT: DINA, M.

APPLICANT: DINA, D.

APPLICANT: DINA, D.

TITLE OF INVENTION: COMPOSITIONS THEREOF AND TITLE OF INVENTION: THEREOF FILE REFERENCE: 377882000420

CURRENT APPLICATION NUMBER: US/09/296,477A

CURRENT APPLICATION NUMBER: 09/092,329

EARLIER APPLICATION NUMBER: 09/092,329

EARLIER APPLICATION NUMBER: 09/092,329
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US-09-296-477-5/c
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APPLICANT: SCHWARTS, D.
APPLICANT: ROWAN, M.
APPLICANT: ROWAN, M.
APPLICANT: DINA, D.
TITLE OF INVENTION: COMPOSITIONS THEREOF AND TITLE OF INVENTION: THEREOF
FILE REFERENCE: 377882000420
CURRENT APPLICATION NUMBER: US/09/296,477A
CURRENT FILING DATE: 1999-04-22
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER FILING DATE: 1998-06-05
                                                                                                                 US-09-296-477-5
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                                                                                                                                                                   SEQ ID NO 5
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application Patent No. 6589940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/09296477A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.0%; F
Matches 15; Conservative 0;
                                                                                                                                                                                                                                                                 EARLIER APPLICATION NUMBER: 60/048,793
EARLIER FILING DATE: 1997-06-06
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EARLIER APPLICATION NUMBER: 60/048,793
EARLIER FILING DATE: 1997-06-06
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                 FEATURE:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
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                                                         Similarity
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GAACGITCGAGATGA 20
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                                       Conservative
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                                                                                                                                 Synthetic
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                                                       71.4%;
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Pred. No.
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RESULT 19
US-09-107-532A-1566
; Sequence 1566, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
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; OTHER INFORMATION: synthetic polynucleotide sequence
US-09-791-500-1
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US-09-791-500-1
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                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Raz, Eyal
APPLICANT: Raz, Eyal
APPLICANT: Rachmilewitz, Daniel
APPLICANT: Rachmilewitz, Daniel
APPLICANT: Rachmilewitz, Daniel
APPLICANT: Rachmilewitz, Daniel
TITLE OF INVENTION: Method for Treating Inflammatory Bowel
TITLE OF INVENTION: Disease and Other Forms of Gastrointestinal Inflammation.
FILE REFERENCE: 6510-202US1
CURRENT APPLICATION NUMBER: US/09/791,500
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 39
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 15
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/308,036A CURRENT FILING DATE: 2000-02-16 PRIOR APPLICATION NUMBER: PCT/US97/19004 PRIOR FILING DATE: 1997-10-09 PRIOR APPLICATION NUMBER: 60/028,118 PRIOR APPLICATION NUMBER: 60/028,118 PRIOR FILING DATE: 1996-10-11 NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Roman, Mark
TITLE OF INVENTION: Immunostimulatory
TITLE OF INVENTION: Polynucleotide/Immunomodulatory Molecule Conjugates
FILE REFERENCE: 6510-172CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
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Pred. No.
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32;
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Best Local (
APPLICANT: Simpson, John W.

TITLE OF INVENTION: Methods and Formulations for the Separation of TITLE OF INVENTION: Biological Macromolecules FILE REFERENCE: Cura-31: MegaBACE (15966-531)

CURRENT APPLICATION NUMBER: US/09/374,174B

CURRENT FILING DATE: 1999-08-13

PRIOR APPLICATION NUMBER: USSN 60/107,798

PRIOR PILING DATE: 1998-11-10

NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (781)893-5007
TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 1566:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/107,532A
APPLICATION UNMEER: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION UNMEER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
PREFEDENCE JULY 2, 1897
ATTORNEY/AGENT INFORMATION:
NAME: ARINIELLO, Pamela Deneke
REGISTRATION NUMBER: 40,489
PREFEDENCE JULY 2, 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...813
SEQUENCE DESCRIPTION: SEQ ID NO: 1566:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
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ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANTI-SENSE: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                 239 TTGTCGAACGTTCGAAAT 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16;
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TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                              Ruiz-Martinez, Maria C
                                                                                                                                                                                                         Berka, Jan
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Pred. No. 66;
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR PELICATION NUMBER: US 60/094,190
PRIOR PILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 2256
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US-09-252-991A-2256
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US-09-252-991A-2425
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US-09-252-991A-2425/c
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LENGTH: 1069
TYPE: DNA
ORGANISM: Bacteriophage M13mp18
                                                                      PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0
NUMBER OF SEQ ID NOS: 331
SEQ ID NO 2425
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local
                                                                                                                                           FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                         APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1497
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
           TYPE: DNA ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Wherein an "N" between residues OTHER INFORMATION: G, A, T or C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                      ENGTH: 1950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                   1218
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TCGTCGAACGTTCGAGAT 18
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Similarity 88.9%;
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                                                                                                                                                                                                                           107196.136
                                                                                                         UMBER: US 60/094,190
1998-07-27
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Pred. No. 71;
0; Mismatches
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Pred. No. 68
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Query Match

70.5%; Score 14.8;

BB

4.

Length 1950;

RESULT 24 US-08-750-007-4

Sequence 4, Application US/08750007
Patent No. 5801016
GENERAL INFORMATION:

APPLICANT: MORIOKA, :
APPLICANT: UEKI, JUN
TITLE OF INVENTION: 1

DNA FRAGMENT, RECOMBINANT VECTOR

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; FEATURE:
; NAME/KEY:
; LOCATION:
US-08-446-794A-5
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US-08-446-794A-5
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                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ver:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,794A
                                                                                                                                                                                                                                                                                                TELEFAX: 703-205-8050 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: UEKI, JUN
APPLICANT: MORIOKA, S
TITLE OF INVENTION: I
TITLE OF INVENTION: I
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: MURPHY JR, GERALD M
REGISTRATION UMBER: 28,977
REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                               MOLECULE TYPE: DNA (genomic) FEATURE:
                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                      TYPE: STRANDEDNESS: SIL
                                                                                                                                                                                                                                                                                                  TELEPHONE: 703-205-8050
                                                     Local Similarity es 16; Conserv
                                                                                                                                                                     LOCATION:
                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                     LENGTH: 2799 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: BIRCH, STEWART, KOLASCH AND BIRCH STREET: P.O. BOX 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         847 TCGGCGAACGATCGAGAT 830
751 GTCAAACGTTCGATATGA 768
                         3 GTCGAACGTTCGAGATGA 20
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1876..1983
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88.9%;
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0; Mismatches
                                                                  Score 14.8;
Pred. No. 77;
                                                       Mismatches
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RESULT 25
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                                                                ; ORGANISM: Homo sapiens US-09-621-976-12664
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US-08-750-007-4
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Best Local S
Matches 16
Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                             Sequence 12664, Application US/09621976 Patent No. 6639063
                                                                                                                                SOFTWARE: Patent.pm
SEQ ID NO 12664
                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                              TITLE OF INVENTION: ESTS and Encoded Human Proteins. FILE REFERENCE: GENSET.054PR2 CURRENT APPLICATION NUMBER: US/09/621,976 CURRENT FILING DATE: 2000-07-21 NUMBER OF SEQ ID NOS: 19335
                                                                                                                                                                                                                                             APPLICANT: Jobert, S. APPLICANT: Giordano,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (703) 205-8050 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                             APPLICANT: Dumas Milne Edwards, J.B
                                                                                                 TYPE: DNA
                                                                                                               ENGTH: 424
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NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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NAME: MURPHY JR, GERALD M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY:
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TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                             751 GTCAAACGTTCGATATGA 768
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Similarity 88.9%;
16; Conservative
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PO BOX 747
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69.5%;
ilarity 81.0%;
Conservative
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Score 14.6; D
Pred. No. 78;
0; Mismatches
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Pred. No. 77;
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                                4; Length 424;
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RESULT 26
US-09-221-017B-893
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                                                          Query Match
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Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP2311
FILING DATE: 09-APR-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU
APPLICATION NUMBER: PCT/AU
FILING DATE: 10-DEC-1998
ATTORNEY/AGENT INFORMATION:
NAME: MONTOY, Gladys H
REGISTRATION NUMBER: 32,43
                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/221,017B
FILING DATE: 23-DEC-1998
CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION: 650-813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PP11
FILING DATE: 31-DEC-1997
PRIOR APPLICATION NUMBER: PP15
APPLICATION NUMBER: PP15
FILING DATE: 30-JAN-1998
                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                          ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                      ANTI-SENSE:
                                                                                                                                                                                                                                   RYPOTHETICAL:
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SOFTWARE: FastSEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 755 PAGE CITY: Palo Alto
                                                         Local Similarity les 17; Conserv
                                                                                                                                       NAME/KEY: misc_feature LOCATION: 1...3468
                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 650-0-192
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                                                                                                                                                                                       ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                  LENGTH: 3468 base pairs TYPE: nucleic acid sTRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: MORRISON & FOERSTER
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1936 TCGTCGTGCTTTCGAGGTGAT 1956
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N: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF
                                                                         69.5%;
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                                                                            Score 14.6; DB Pred. No. 1e+02;
                                                              Mismatches
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CORRESPONDENCE ADDRESS:

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RESULT 28
US-08-447-169A-36
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                                                                                                                                                                                                                                                                                                                                                     US-08-399-412A-58
                                                                                                                                                                                                                                                                            Best Loc
Matches
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GENERAL INFORMATION:
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                                                                                          Sequence 36, Application US/08447169A Patent No. 5811533
                                                                                                                                                                                                                                                                                                              Query Match
                                                                      Patent No. 5811533
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO. SEQUENCE CHARACTERISTICS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 10-JUNE-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 07/536,428
FILING DATE: 11-JUNE-1990
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 07/964,624
FILING DATE: 21-OCTOBER-1992
ATTORNEY/AGENT INFORMATION:
APPLICANT: JANJIC, N
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Parma, David
APPLICANT: Gold, Larry
TITLE OF INVENTION: High-Affinity Oligonucleotide
TITLE OF INVENTION: Ligands To Secretory Phospholipase
TITLE OF INVENTION: A2 (SPLA2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Julie L. Bernard
REGISTRATION NUMBER: 36,450
REFERENCE/DOCKET NUMBER: NE
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/399, FILING DATE: 6 MARCH-1995 CLASSIFICATION: 536 PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/714,131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordDerfect 5.1
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (303)
                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Swanson & Bratschun, L.L.C.
STREET: 8400 E. Prentice Avenue, Suite 200
CITY: Englewood
                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                     48
                                                                                                                                                                                                                                                                            12;
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                                                                                                                                                                                                     CGAACGUUCGACAUGA 63
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             JANJIC, N. and GOLD, L.
VENTION: HIGH-AFFINITY OLIGONUCLEOTIDE
VENTION: LIGANDS TO VASCULAR ENDOTHELIAL
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                      linear
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                                                                                                                                                                                                                                                                                           68.6%;
75.0%;
 GROWTH FACTOR (VEGF)
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                                                                                                                                                                                                                                                                                             Score 14.4;
Pred. No. 80;
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RESULT 29
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                                                                                                                    Patent No. 5849479

GENERAL INFORMATION:
APPLICANT: JANGIC, N.
TITLE OF INVENTION: H
TITLE OF INVENTION: L
TITLE OF INVENTION: TITLE OF SEQUENCES:
                                                                                                                                                                                                                                                                                        US-08-233-012C-36
                                                                                                                                                                                                                                                  Sequence 36, Application US/08233012C Patent No. 5849479
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 19-MAY-1995
CLASSIFICATION: 435
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/233,012
APPLICATION NUMBER: 08/233,012
FILING DATE: 25-APRIL-1994
PRIOR APPLICATION UNMBER: 08/205,515
APPLICATION NUMBER: 08/205,515
FILING DATE: 03-MARCH-1994
PRIOR APPLICATION DATA: 07/964,624
APPLICATION NUMBER: 07/964,624
FILING DATE: 21-OCTOBER-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (303) 793-34
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 07/536,42
FILING DATE: 11-JUNE-1990
ATTORNEY/AGENT INFORMATION:
NAME: BARRY J. SWANSON
REGISTRATION NUMBER: 33,215
REFERENCE/DOCKET NUMBER: NEX1
TELEPHANE: (303) 793-333
TELEPHANE: (303) 793-3433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 80111

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50

COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
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STREET: 8400 E.
CITY: Englewood
COUNTRY: U
                                                                     STREET:
                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ropology:
                                                                                                                                                                                                                                                                                                                                                               45
                                               SSEE: Swanson & Bratschun, L.L.C.
TT: 8400 E. Prentice Place, Suite 200
Englewood
                                                                                                                                                                                                                                                                                                                                                                                                                                   l Similarity
12; Conserv
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                                                                                                                                                                                                                                                                                                                                                               CGUAGAGCGUUCGACAUGA 63
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                                 Colorado
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8400 E. Prentice Place,
                  USA
                                                                                                                                                                                                                JANJIC, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                             N. and GOLD, L.
HIGH-AFFINITY OLIGONUCLEOTIDE
LIGANDS TO VASCULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                    67.6%; Score 14.2; 63.2%; Pred. No. 1e
                                                                                                                                                            ENDOTHELIAL GROWTH FACTOR
                                                                                                                            146
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, Suite
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
MEDIUM TYPE: storage

3.50 inch,

OPERATING SYSTEM: SOFTWARE: WordPer

E: Diskette, 3.1 E: storage IBM compatible SYSTEM: MS-DOS WordPerfect 5.1

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; NAME/KEY: CDS
; LOCATION: (154)..(579)
US-09-848-295-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 30
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US-08-233-012C-36
                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 1535
                                  Best Local Similarity
Matches 16; Conserv
                                                     Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09848295
Patent No. 6623941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
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CURRENT APPLICATION NUMBER: US/09/848,295
CURRENT FILING DATE: 2001-05-04
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Baker, Kevin
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Human Tumor Necrosis Factor TR20 and Methods Based
TITLE OF INVENTION: Thereon
                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/202,193
PRIOR FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-333
TELEFAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 36:
                                                                                                                                                                                    TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/536,428
FILING DATE: 11-JUNE-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/964,624
APPLICATION NUMBER: 07/964,624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/714,131
FILING DATE: 10-JUNE-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-OCTOBER-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/
FILING DATE: 25-APRIL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 33,215
REFERENCE/DOCKET NUMBER: NEX14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Barry J. Swanson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45 CGUAGAGCGUUCGACAUGA 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 CGTCGAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 67.6%; l Similarity 63.2%; 12; Conservative
 3 GTCGAACGTTCGAGATGAT 21
                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                     67.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/233,012C
                                    0,
                                                     Score 14.2; DB 4;
Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14.2; DB
Pred. No. 1e+02;
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                                      Mismatches
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                                                                       Length 1535;
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                                      Indels
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                                    Gaps
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                                                                                                                                                                     RESULT 32
US-09-173-914-6/c
                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-956-171E-203
             Sequence 6, Application US/09173914

Patent No. 6171857

GENERAL INFORMATION:
APPLICANT: Hendrickson, Eric
TITLE OF INVENTION: A No. 6171857el Leucine Zipper, KARP-1 and
TITLE OF INVENTION: Methods of Regulating DNA Dependent Protein Kinase Activity
FILE REFERENCE: B0877/7017/HK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 203, Application US/08956171E Patent No. 6593114 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
CURRENT APPLICATION NUMBER: US/09/173,914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 203:
SEQUENCE CHARACTERISTICS:
LENGTH: 4715 base pairs
TYPE: nucleic acid
STRANDENNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/009,861
APPLICATION NUMBER: 5,1996
APPLICATION NUMBER: 08/781,986
APPLICATION NUMBER: 08/781,986
FILING DATE: January 3, 1997
ATTORNEY_AGENT INFORMATION:
NAME: Mark J. Hyman
                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1467
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REFERENCE/DOCKET NUMBER: PB
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTMARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Charles Kunsch
Gil H. Choi
                                                                                                                                                                                                                                                         1285 CGTTAAAAGTTCGAGATGA 1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences NUMBER OF SEQUENCES: 5256
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE DESCRIPTION: SEQ ID NO: 203:
                                                                                                                                                                                                                                                                                                                                           16;
                                                                                                                                                                                                                                                                                                 2 CGTCGAACGTTCGAGATGA 20
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GTCGAAAGTTCGAGACCAT 1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/956,171E FILING DATE: 20-Oct-1997 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Rockville
STATE: Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (240) 314-1224
TELEFAX: (301) 309-8439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Human Genome Sciences,
                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Steven C. Barash
Michael R. Fannon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gil H. Choi
Patrick S. Dillon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Craig A. Rosen
                                                                                                                                                                                                                                                                                                                                                               67.6%;
84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB 4;
Pred. No. 1.8e+02;
0; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                                                     DB 4;
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APPLICANT: Shah, Sanjay Krishnakant
APPLICANT: McDaniel, Robert
APPLICANT: Tang, Li
ITITLE OF INVENTION: RECOMBINANT OLEANDOLIDE POL
FILE REFERENCE: 30062-20029.00
CURRENT APPLICATION NUMBER: US/09/428,517
CURRENT FILING DATE: 1999-10-28
EARLIER APPLICATION NUMBER: 60/120,254
EARLIER APPLICATION NUMBER: 60/106,100
EARLIER APPLICATION NUMBER: 60/106,100
EARLIER FILING DATE: 1998-10-29
NUMBER OF SEQ ID NOS: 12
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                                                                                                                                                                                                                                                                                RESULT 34
US-09-103-840A-2/c
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Description of Artifical Sequence: Recombinant US-09-428-517-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-428-517-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-09-173-914-6
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Best Local Similarity
Matches 16; Conserv
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Best Local 9
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                                                                                                                                                                                                                                             Sequence 2, Application US/09103840A Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                      APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DIA SEQUENCES FOR STRA
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT FILING DATE: 1998-06-24
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
EQ ID NO 2
                                                                                                                                               APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT FILING DATE: 1998-10-16
EARLIER APPLICATION NUMBER: 60/064,557
EARLIER FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 12
SOFTWARE: PatentIn Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
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5. 6251636
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84.2%;
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Pred. No. 2.
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APPLICANT: RAZ, E.
APPLICANT: SCHWARTZ, D.
APPLICANT: ROMAN, M.
APPLICANT: DINA, D.
TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGONUCLEOTIDES,
TITLE OF INVENTION: COMPOSITIONS THEREOF AND METHODS OF USE
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 377882000420
CURRENT APPLICATION NUMBER: U9/09/296,477A
CURRENT FILING DATE: 1999-04-22
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER APPLICATION NUMBER: 09/092,329
EARLIER APPLICATION NUMBER: 06/048,793
EARLIER FILING DATE: 1998-06-05
EARLIER FILING DATE: 1997-06-06
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US-09-103-840A-1/c
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SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 15 LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, Robert
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
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                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: VENTER, JOHN C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAI
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
OTHER INFORMATION: H37Rv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Mycobacterium tuberculosis FEATURE:
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OTHER INFORMATION:
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84.2%;
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84.2%;
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Pred. No. 1.2e+02
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RESULT 38
US-08-485-885-63/c
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US-08-710-134-63/c
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Best Local &
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                                                                                                                                                            Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                         TELEPHONE: 508-872-840
TELEFAX: 508-872-5415
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dugan, Deborah A.
REGISTRATION NUMBER: 37,315
REFERENCE/DOCKET NUMBER: IG5-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 508-872-8400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                    TOPOLOGY: 1i
MOLECULE TYPE:
DESCRIPTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Synthetic construct
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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ADDRESSEE: Genzyme Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                             LENGTH: 66 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/0: FILING DATE: 13-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Framingham
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         Application US/08485885
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                                                                                                                                              Conservative
                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                      other nucleic acid
/desc = "Oligonucleotides"
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                                                                                                                                                            65.7%;
88.2%;
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93.3%;
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Pred. No.
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                                                                                                                                                            Score 13.8; DB 2;
Pred. No. 1.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                             Sequence 64, Application US/08710134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMMER: US/08/710,134
FILING DATE: 13-SEP-1996
CLASSIFICATION: 435
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DESCRIPTION:
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                                                                                                                                                                                                                                                                                        APPLICANT: SHUBER, TITLE OF INVENTION: TITLE OF INVENTION:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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STRANDEDNESS: sing
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/desc = "Oligonucleotides"
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88.2%;
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Pred. No. 1.7e+02;
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ATTORNEY/AGENT INFORMATION:

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,885

FILING DATE: 07-JUN-1995

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:
NAME: Dugan, Deborah A.
REGISTRATION NUMBER: 37,315

REFERENCE/DOCKET NUMBER: GEN4-12.1

TELECHONE: 508-872-8400

TELECHONE: 508-872-8400

TELECHONE: 508-872-5415

INFORMATION FOR SEQ ID NO: 64:
SEQUENCE CHARACTERISTICS:
LENGTH: 86 base pairs

TYPE: nucleic acid
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US-08-485-885-64/c
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Patent No. 5849483
GENERAL INFORMATION:
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                                        Matches 15; Conservative
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Best Local Similarity
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SEQUENCE CHARACTERISTICS:
LENGTH: 86 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Oligonucleotides"
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TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Oligonucleotides"
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ADDRESSEE: Genzyme Corporation
STREET: One Mountain Road
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TITLE OF INVENTION: HIGH THROUGHPUT SCREENING METHOD FOR
TITLE OF INVENTION: SEQUENCES OR GENETIC ALTERATIONS IN NUCLEIC ACIDS
NUMBER OF SEQUENCES: 65
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REGISTRATION NUMBER: 37,315
REFERENCE/DOCKET NUMBER: IG
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Search completed: April 6, 2004, 03:58:41 Job time : 114 secs

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Maximum Match 100%
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                                                                              TITLE
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Nat. Genet. 25 (2), 235-238 (2000)
                                                                                      Roest Crollius, H., Jaillon, O., Dasilva, C., Bouneau, L., Bernot, A., Fizames, C., Wincker, P., Brottier, P., Quetie Saurin, W. and Weissenbach, J.
                                                                                                                                AL305428.1 GI:8197678
GSS; genome survey sequence.
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
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AL305428
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CF434519 EST670864
CCD572389 PBL 20 HO
CA707068 wdk27.pk0
CA827269 1114012C1
BH387860 AG-ND-129
BE052250 GA E3003
AW710594 e4\overline{AD} \text{11.6} \text{20.020}
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BW1774467 BW174467
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CA196886 SCBFAD109
BGG31701 h112-118
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CD1983371 MS1-0038U
BI075646 IP1 23 C0
CD177754 MS1-00117
CD092357 MC1-00967
AG20347 MS1-0064U
CD193376 MS1-0064U
CD190376 MS1-0064U
CD190545 MS1-0064U
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CD124011 ME1-0084T
AW497269 9B500067
BJ195526 BJ19526
CF4311883 NIT1-11_E

DNA

linear GSS 01-SEP-2000 nce T7 end of clone

BJ195526 NIT1_6_D1 NIT1_11_E

Roest Crollius, H., Jaillon, O., Dasilva, C., Ozouf-Costaz, C., Fizames, C., Fischer, C., Bouneau, L., Billault, A., Quetier, F.,

Quetier, F.,

Fisher, C.

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KEYWORDS
SOURCE
ORGANISM
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This sequence is a single read and was generated as part of a large scale clone-end sequencing project of the Tetraodon nigroviridis genome. For more information, please take a look at http://www.genoscope.cns.fr/Tetraodon.
Genome Project. All sequences in the project were assembled annotated. This entry and all the assembled sequences can be in the following URL http://bioinfo.iq.usp.br/schisto/
                                                                                                                                          Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
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                                                      Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni
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                                                                                       +55-11-3091-2173
+55-11-3091-2186
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/mol_type="genomic DNA"
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/clone="007J10"
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Contact: Dr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        manson:
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90.5%;
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Verjovski-Almeida,S., DeMarco,R., Martins,E.A.L., Guimaraes,P.E.M., Ojopi,E.P.B., Paquola,A.C.M., Piazza,J.P., Nishiyama,M.Y. Jr., Kitajima,J.P., Adamson,R.E., Ashton,P.D., Bonaldo,M.F., Coulson,P.S., Dillon,G.P., Farias,L.P., Gregorio,S.P., Ho,P.L., Leite,R.A., Malaquias,L.C.C., Marques,R.C.P., Miyasato,P.A., Mascimento,A.L.T.O., Ohlweiler,F.P., Reis,E.M., Ribeiro,M.A., Sa,R.G., Stukart,G.C., Soares,M.B., Gargioni,C., Kawano,T., Rodrigues,V., Madeira,A.M.B.N., Wilson,R.A., Menck,C.F.M., Setubal,J.C., Leite,L.C.C. and Dias-Neto,E.
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This sequence was derived from the FAPESP Schistosoma mansoni
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Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
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/lab_host="in vitro culture"
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/note="Vector: pGEM T-easy"
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/dev_stage="miracidium"
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/note="Vector: pGEM T-ea
                                                                                                              /mol_type="mRNA"
/db_xref="taxon:6183"
/clone="ML1-0046T-M209-C11.
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                                                                                                                                                                                                                                                                                                                                                                     Genome Project. All sequences in the project were assembled and annotated. This entry and all the assembled sequences can be seen in the following URL http://bioinfo.iq.usp.br/schisto/Plate: MEI-0086G-A185 row: 2 column: H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schistosoma mansoni
                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
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+55-11-3091-2186
                                                                                                                       Conservative
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                                                                                                                                                                                                                                         /db xref="taxon:6183"
/clone="ME1-0086G-A185-H02.B"
/gex="mixed gool"
/dev stage="egg"
//ab book="#egg"
                                                                                                                                                                                                                                                                                                     organism="Schistosoma mansoni"
(mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                     ocation/Qualifiers
                                                                                                                                                                                                 'note="Vector: pGEM T-easy"
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90.5%;
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ne_lib="ME1-0086"
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Pred. No. 4.3e+02;
0; Mismatches 2
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                                                                                                                                       Score 17.8; DB 14;
Pred. No. 4.7e+02;
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. 4.7e+02;
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sequence.
CD572389
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                                                                                                                                                                                  CD572389.1
EST.
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Contact: Paul Coussens
Michigan State University
1205H Anthony Hall, East 1
                                                                                                                                                                                                                                                                                                                                                                     <u>,...</u>
                                                                                                                                                  Sus scrofa (pig)
Sus scrofa
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Allium cepa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF434519.1
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Eukaryota; Metazoa; Chordata; Cra
Mammalla; Eutheria; Cetartiodacty
1 (bases 1 to 221)
Nobis,W., Ren,X., Suchyta,S.P., Z
Development of a porcine brain cD
microarray resource
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Department of Horticulture USDA-ARS and University of Wisconsin 1575 Linden Drive, Madison, WI 53706, Tel: 608-262-1830 Fax: 608-262-4743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 785)
Havey, M.J., Cheung, F., V
Expressed Sequence Tags
tissues (Allium cepa)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: mjhavey@facstaff.wisc.edu
TIGR sequence name ACAAA82TR: For mc
http://haveylab.hort.wisc.edu
Seq primer: CAG GAA ACA GCT ATG ACC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAAA82, mRNA sequence.
CF434519
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="Callus, roots, and young bulbs" /clone_Tib="normalized cDNA library of onion" / note="vector: pcMVSport6.1-ccdb (Invitrogen); Site_1 EcoRV (5'); Site_2: NotI (3'); Equal molar amounts of from callus, roots, and young bulbs were combined to synthesize the library. Normalization to enrich for low-copy transcripts was performed by proprietary techniques of Invitrogen."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Texas Legend(roots)"
/db_xref="taxon:4679"
/clone="ACAAA82"
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/cultivar="Red Creole(bulbs), unknown(callus),
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Pred. No. 5.
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                                                a,S.P., Zanell,A.J. and Coussens, E brain cDNA library, EST database
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Library Sus scrofa cDNA clone PBL 5',
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East Lansing,

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wdk2c.pk0004.g12 wdk2c Triticum aestivum cDNA clone wdk2c.pk0004.g12 5' end, mkNA sequence.
CA707068
CA707068.1 GI:25428861
EST.
Triticum aestivum (bread wheat)
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Seq pri
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                   N
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Spermatophyta; Magnoliophyta; Liliopsida;
Pooideae; Triticeae; Triticum.
1 (bases 1 to 461)
                                                                                                                                                                                                                                                                                                       Seq
                                                                                                                                                                                                                                                                                                                                                    1 Innovation Way, P.O. Tel: 302-631-2602
                                                                                                                                                                                                                                                                                                                   Email: Scott.V.Tingey@USA.dupont.com
                                                                                                                                                                                                                                                                                                                                                                                                   Crop Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Scott V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tingey, S.V., Powell, W., Wolters, P., Dolan, M., Miao, G., Caraher, N. and Hanafey, M.K.
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                                                              Similarity
CGTCGAACGTTCGAGATGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="Brain and central nervous system"
/dev_stage="fetal, 10-day, 21-day, 5-week, mature boar,
post-pubertal gilt, lactating sow"
/clone_lib="Porcine Brain Library"
/note="Porcine (Pig) brain library includes pre-frontal
cortex, frontal cortex, hippocampus, hypothalamus,
parietal cortex, amygdala, cerebellum, spinal cord, eye,
accumbens, and fetal pig CNS"
                                                                                                                          /note="Vector: pBluescript SK+; Site 1: EcoRI; Site 2:
XhoI; Wheat (Triticum aestivum L.) developing kernel,
days after anthesis."
                                                                                                                                                                          /clone="wdk2c.pk0004.g12"
/tissue_type="kernel"
/clone_lib="wdk2c"
                                                                                                                                                                                                                         /organism="Triticum aestivum"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'sex="male and female"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
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                                                             .3e+03;
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                                                                             DB 14;
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                                                                             Length 461;
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BH387860/c
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CA827269
CA827269.1
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                1 (bases 1 to 595)
Hong, Y.S., Hogan, J.R., Wang, X., Sarkar, A., Sim, C., I Ren, C., Huff, E.R., Carlile, J.L., Black, K., Zhang, H.-Gardner, M.J. and Collins, F.H.
Construction of a BAC library and generation of BAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
Contact: Walbot V
                                                                                                                                                                                              GSS.
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Plate: 1114012 row: C colu
Location/Qualifiers
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Maize ESTs from various
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Construction of a BAC library and generation of BAC end sequence-tagged connectors for genome sequencing of the African
                                                                                                                        Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
                                                                                                                                                                                                            BH387860
BH387860.1
                                                                                                                                                                                                                                          AG-ND-129F22.TF ND-TAM Anopheles gambiae genomic clone AG-ND-129F22, genomic survey sequence.
                                                                                                                                                                                                                                                                                BH387860
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stanford University
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="dbEST:3524 1 56_1_G06.y_1"
/db_xref="taxon:4577"
/db_xref="taxon:4577"
/clone lib="1114 - Uniquene IV from Maize Genome Project"
/note="This library represents the unique genes found in
the fourth round of EST sequencing at Stanford University
for the maize genome project. Sequences are present from
libraries 1091 and 3524. Contigs were assembled using
ZmDBAssembler and 2 representatives from each contig were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           selected for the Unigene set. All singlets were also selected."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Zea mays"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: bjloftus@tigr.org
This clone is from an A. gambiae BAC library (ND-TAM) provided by
F.H. Collins and sequenced by The Institute for Genomic Research
(TIGR). The BAC library was generated from A. gambiae PEST strain
DNA. All DNA was extracted from newly hatched first instar larvae
to minimize the inclusion of DNA from microorganisms that inhabit
the gut. The DNA is derived from mixed sexes of larvae. The BAC
library was constructed at Texas A&M University BAC Center
University, College Station, Texas 77843-2123, USA using a HindIII
partial digest.
Seq primer: M13 For
                                                                                                                                         Unpublished (2000)
Contact: Wing RA
Clemson University Genomics Institute
Clemson University
100 Jordan Hall, Clemson, SC 29634, Us
                                                                                                                                                                                                                                                                                                                                                   Gossypium arboreum
Gossypium arboreum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Malvales; Malvaceae; Malvoideae; Gossypium.
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                                                                                                                                                                                                                                                Wing,R.A., Frisch,D., Yu,Y., Main,D., Rambo,T., Simmons,J., Henry,D., Wood,T.C., Leslie,A. and Wilkins,T.A. An integrated analysis of the genetics, development, and evof the cotton fiber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BE052
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The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
Tel: 301 838 0208
Fax: 301 838 3543
                                                        Email: rwing@clemson.edu
Seq primer: TAATACGACTCACTATAGGG
                                                                                                  Tel: 864 656 7288
Fax: 864 656 4293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GA Ea0035L13f Gossypium arboreum 7-10 dpa fiber library Gossypium arboreum cDNA clone GA Ea0035L13f, mRNA sequence.
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Contact: Brendan J Loftus
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gossypium arboreum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BE052250.1 GI:8379306
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Mol. Genet. Genomics 268 (6), 720-728 (2003)
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               quality sequence start: 13 quality sequence stop: 501
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/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Site_1: HindIII"
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/strain="PEST"
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AW710594/c
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232 GTCGAACGTTCAAGATGA 215
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Contact: Bruce A. Roe, University of Oklahoma,
Department of Chemistry and Biochemistry
Advanced Center for Genome Technology, Universi
620 Parrington Oval, Norman, OK 73019, USA
Tel: 405 325 4912
Fax: 405 325 7762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 303)
Zhu,H., Lai,H., Kupfer,D., Dunlap,J.
Two Neurospora crassa EST Databases
Unpublished (1998)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: broe@ou.edu
                                                                                       Similarity
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                                                                      Conservative
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                                                                                                                                                            /clone_lib="Neurospora crassa evening cDNA library"
/note="Vector: pBlueScript SK-; Site 1: Xbal; Site 2:
ECORI; See: Bell-Perdersen,D., et al. PNAS 93:13095,1996.
5' end of cDNA cloned into Xbal site of pBluescript; 3'
end of cDNA cloned into EcoRI site of pBluescript"
                                                                                                                                                                                                                                                                                                         /organism="Neurospora crassa"
/mol type="mRNA"
/strain="Strain 30-7 (bd; A)"
/db_xref="taxon:5141"
                                                                                                                                                                                                                                                                                                                                                                                                  location/Qualifiers
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/note="Vector: pBK-CMV; Site_1: EcoRI; Site_2: XhoI"
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/mol_type="mRNA"
/strain="AKA"
                                                                                                                                                                                                                                                                     tissue_type="tissue harvested following 22hr growth
                                                                                                                                                                                                                                                                                            clone="e4h01ne"
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'clone="GA__Ea0035L13f"
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Neurospora crassa evening cDNA library Neurospora crassa
e4h01ne 3', mRNA sequence.
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                                                                                       78.1%;
94.4%;
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                                                                                       Score 16.4; DB 1
Pred. No. 1.8e+03
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Pred. No. 1.
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                                                                                                        DB 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  University of Oklahoma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      broe@ou.edu
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BW170465
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MEDLINE
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                                                                                                                                                                                                                                    AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340
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Apis mellifera (honeybee)
Apis mellifera (honeybee)
Apis mellifera
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Hymenoptera; Apocrita; Aculeata; Apo
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1 (bases 1 to 424)
Satou,Y., Shin-i,T., Kohara,Y. and Satoh,N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BW170465 MORI Satch unpublished cDNA library, neural cintestinalis cDNA clone rcinc008n07 3', mRNA sequence.
                                                              Department of Entomology University of Illinois 505 S. Goodwin Ave., Urb
                                                                                                                                                           whitfield, C. W., Band, M.R., Bonaldo, M.F., Ku Pardinas, J., Robertson, H.M., Soares, B. and Annotated expressed sequence tags and cDNA of brain and behavior in the honey bee Genome Res. 12 (4), 555-566 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                    BI515898 439 bp mRNA linu
BB160020B20D02.5 Bee Brain Normalized Library,
cDNA clone BB160020B20D02 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Nori Satch
Department of Zoology
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                                                                                                                                                                                                                                                                                                                                                                     BI515898
BI515898.1 GI:15366272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BW170465.1 GI:24560352
                               Tel: 217 265 0309
Fax: 217 244 3499
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                                                                                                                  Contact: Gene
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research was funded by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          satoh@ascidian.zool.kyoto-u.ac.jp.
                                                            Goodwin Ave., Urbana,
            generobi@life.uiuc.edu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="rcinc008n07"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:7719"
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94.4%;
                                                                                                                 E. Robinson
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                                                                IL 61801,
University
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of Illinois Critical
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BW300285/c
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Best Local Similarity
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                                                                                                                                                                                                                                                                            1 (bases 1 to 445)
Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
Contact: Nori Satoh
Department of Zoology
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BACKWARD: ATTAACCCTCACTAAAG
Plate: BB160020B20 row: D column:
Seq primer: AGCGGATAACAATTTCACACAGGA
High quality sequence stop: 439.
Location/Qualifiers
                                                                                                                                         Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
Tel: 81-75-753-4081
Fax: 81-75-705-1113
Email: satoh@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BW300285 Nori Satoh unpublished cDNA library, neural intestinalis cDNA clone cinc008n07 5', mRNA sequence.
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Ciona intestinalis
Ciona intestinalis
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Phlebobranchia; Cionidae; Ciona.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone lib="Bee Brain Normalized Library, BB16" /note="Organ: brain; Vector: pT773-Pac; Site 1: EcoR1; Site 2: Not1; The BB16 library was contributed by the Soares laboratory and it was constructed and normalized as described by Bonaldo, M.F., Lennon, G. and Soares, M.B. (1996), Genome Research 6(9): 791-806. RNA was prepared from dissected brains of adult worker bees of various ages and various behavioral groups. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /strain="mixed strains of European bees, A.m. ligustica" /db_xref="taxon:7460"
                                       /organism="ciona intestinalis"
/mol type="mRNA"
/db xref="taxon:7719"
/clone="cinc008n07"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="brain"
/dev stage="adult worker honey bee"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Apis mellifera"
/mol_type="mRNA"
/tissue_type="neural complex"
/clone_lib="Nori Satoh unpublished cDNA library, neural
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94.4%;
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RESULT 16
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BP018564/c
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Arabidopsis Genomic 
Unpublished (1997)
                                                                                               Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                      Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
                                                                                                                                                                                                                             B29433
                                                                                                                                                                                                                                                        B29433 504 bp
F19L12TFB IGF Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502,
Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Phlebobranchia; Cionidae; Ciona.

1 (bases 1 to 457)
Satoh,N., Satou,Y., Kohara,Y. and Shin-i,T.
Expressed genes in Ciona intestinalis
Unpublished (2000)
                                  Use of a BAC End Sequence Database To Identify Minimal Overlaps for
                                                                1 (bases 1 to 504)
Rounsley, S.D., Kelley, J.M.,
                                                                                                                                                                                                         B29433.1 GI:2515399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Nori Satoh
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ciona intestinalis
                                                    Venter,J.C.
                                                                                                                                                                                                                                         survey sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              satoh@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="whole animal"
/dev_stage="young adult"
/clone_lib="Nori Satch unpublished cDNA library, young adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Ciona intestinalis"
/mol type="mRNA"
/db xref="taxon:7719"
/clone="ciad54123"
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94.4%;
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Pred. No. 2e+03;
0; Mismatches
                                                                    Field, C.E.,
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                                                                                                                                                                                                                                                    Contact: Gene E. Robinson
Department of Entomology
University of Illinois
505 S. Goodwin Ave., Urbana,
                                                                                                                                                                                                                                                                                                                                                                       Whitfield,C.W., Band,M.R., Bonaldo,M.F., Kumar,C.G., Liu,L., Pardinas,J., Robertson,H.M., Soares,B. and Robinson,G.E. Annotated expressed sequence tags and cDNA microarrays for studies of brain and behavior in the honey bee
                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 511)
Whitfield, C.W., Band, M.R., Bo
Pardinas, J., Robertson, H.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI514876.1 GI:15365250
EST.
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Tel: 301 838 0200
Fax: 301 838 0208
                                                Plate: BB160016B10 row: G column: Seq primer: AGCGGATAACAATTTCACACAGGA
                                                                                                                                   This research was funded by the University of Illinois Critical Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
                                                                                                                                                                                                                       Tel: 217 265 0309
Fax: 217 244 3499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apo
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Location/Qualifiers
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Class: BAC ends
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Department of Eukaryotic Genomics
The Institute for Genomic Research
                                                                                  FORWARD: TAATACGACTCACTATAGGG
BACKWARD: ATTAACCCTCACTAAAG
                                                                                                                                                                                                         Email: generobi@life.uiuc.edu
                                                                                                                                                                                                                                                                                                                                                21929762
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                              quality sequence stop: 511.
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/note="Vector: BeloBACII; Site_1:
Produced by Thomas Altmann"
              Location/Qualifiers
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/strain="Columbia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          db_xref="taxon:3702"
clone="F19L12"
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94.4%;
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Local Similarity
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University of Illinois
505 S. Goodwin Ave., Urbana, IL 61801, USA
                                                                                                                                                                                                                                                              Email: generobi@life.uiuc.edu
This research was funded by the University of Illinois Critical
The research was funded by the University of Illinois Critical
Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation
Award in Functional Genomics to G.E. Robinson and an NSF
Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
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Whitfield, C.W., Band, M.R., Bonaldo, M.F., Kumar, C.G., Liu, L.,
Pardinas, J., Robertson, H.M., Soares, B. and Robinson, G.E.
Annotated expressed sequence tags and cDNA microarrays for studies
of brain and behavior in the honey bee
Genome Res. 12 (4), 555-566 (2002)
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Apis mellifera (honeybee)
Apis mellifera
Apis mellifera
Apis mellifera
Apis mellifera
Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Hexapoda; Apocrita; Aculeata; Apo
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BI514893.1 GI:15365267
EST.
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BB160016B10H09.5 Bee Brain Normalized Library,
CONA Clone BB160016B10H09 5', mRNA sequence.
                                                                                                                                                      Plate: BB160016B10 row: H column: 09 Seq primer: AGCGGATAACAATTTCACACAGGA
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                                                                                                                                                                                                  FORWARD: TAATACGACTCACTATAGGG
BACKWARD: ATTAACCCTCACTAAAG
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Location/Qualifiers
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/strain="mixed strains of European bees, predominantly
A.m. ligustica"
/db xref="taxon:7460"
/clone="BB160016B10G01"
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/dev_stage="adult worker honey bee"
/lab_host="DH10B"
/organism="Apis mellifera"
/mol type="mRNA"
/strain="mixed strains of European bees,
A.m. ligustica"
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94.4%;
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AUTHORS
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401

Matches Query Match

BI514893 RESULT 18

VERSION ACCESSION DEFINITION **FOCUS**

KEYWORDS

ORGANISM

ORIGIN

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Contact: Nori Satch
Department of Zoology
Kyoto University
Sakyo-ku, Kyoto, Kyoto
Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 635)
Satou, Y., Shin-i, T., Koha
Expressed genes in Ciona
Unpublished (2002)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Clone lib="Bee Brain Normalized Library, BB16"
/note="Organ: brain; Vector: pT7T3-Pac; Site_1 EcoR1;
/note="Norgan: brain; Vector: pT7T3-Pac; Site_1 by the
Site_2: Not1; The BB16 library was contributed by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. RNA was
prepared from dissected brains of adult worker bees of
                                                                                                                                                                                          /tissue_type="whole animal"
/dev_stage="tailbud embryo"
/clone_lib="Nori Satoh unpublished cDNA library, tailbud embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     various ages and various behavioral groups. "
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/dev_stage="adult worker honey bee"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                               /organism="Ciona intestinalis"
/mol type="mRNA"
/db xref="reaxon:7719"
/clone="rcitb080n02"
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/clone="BB160016B10H09"
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                                                                                                        78.1%;
94.4%;
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Pred. No. 2.1e+03;
0; Mismatches 1;
                                                                                                        Score 16.4; DB 13;
Pred. No. 2.3e+03;
                                                                                      Mismatches
                                                                                                                               Length 635;
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BW174317
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                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Phlebobranchia; Cionidae; Ciona.

1 (bases 1 to 662)
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Ciona intestinalis
                                                                                                                                                                                                                                                                                                                                                                                                                     intestinalis cDNA clone
BW174317
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                                                                                                                                                                                Sakyo-ku, Kyoto, Kyoto 606-8502,
Tel: 81-75-753-4081
                                                                                                                                                                                                                              Contact: Nori Satch
Department of Zoology
                                                                                                                                                                                                                                                           Satou,Y., Shin-i,T., Kohara,Y. and Satoh,N. Expressed genes in Ciona intestinalis (2002c) Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 650) Satoh, N., Satou, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Urochordata; Phlebobranchia; Cionidae; Ciona.
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AV902415.1 GI:16891513
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: satoh@ascidian.zool.kyoto-u.ac.jp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Nori Satoh
Department of Zoology
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81-75-705-1113
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                                                                                                                                 satch@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
           /clone="rcinc030bl9"
/tissue_type="neural complex"
/clone_lib="Nori Satoh unpublished cDNA library, neural complex"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="whole animal"
/dev stage="young adult"
/clone_lib="Nori Satoh unpublished cDNA library,
adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Ciona intestinalis"
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/db xref="teaxon:7719"
/clone="rciad54123"
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                                                                        organism="Ciona intestinalis"
|mol_type="mRNA"
|db_xref="taxon:7719"
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94.4%;
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Pred. No. 2.3e+03;
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JOURNAL COMMENT
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AUTHORS
TITLE
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ORGANISM
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BW297679/c
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AUTHORS
TITLE
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KEYWORDS
SOURCE
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BW171245
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Best Local Similarity
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                         1 (bases 1 to 707)
Satou,Y., Shin-i,T., Kohara,Y. and Satoh,N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
Contact: Nori Satoh
Department of Zoology
                                                                                                                                                    Ciona intestinalis
Ciona intestinalis
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Sakyo-ku, Kyoto, Kyoto 606-8502,
Tel: 81-75-753-4081
Fax: 81-75-705-1113
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Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
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Eukaryota; Metazoa; Chordata; Ur
Phlebobranchia; Cionidae; Ciona.
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BW171245.1
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                                                                                                                    Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona; Phlebobranchia, Cionidae; Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Nori Satoh
Department of Zoology
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Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
               Kyoto University
                                                                                                                                                                                                   BW297679.1 GI:24878290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: satoh@ascidian.zool.kyoto-u.ac.jp.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Ciona intestinalis"
/mol type="mRNA"
/db xref="teaxon:7719"
/clone="rcinc018d19"
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94.4%;
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94.4%;
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Pred. No. 2.3e+03;
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Pred. No. 2.3e+03;
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RESULT 25
BW174467
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AUTHORS
TITLE
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BW303599/c
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VERSION
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                                                                                                                                 344 TCGTCGAACATTCGAGAT 327
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Fax: 81
Email:
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          BW174467 726 bp mRNA linear EST 04-NOV-2002 BW174467 Nori Satoh unpublished cDNA library, neural complex Ciona intestinalis cDNA clone rcinc030j13 3', mRNA sequence.

BW174467
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1 (bases 1 to 709)
Satou; Y., Shin-i, T., Kohara, Y. and Satoh, N. Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                  Email: satoh@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
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Tel: 81-75-753-4081
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Department of Zoology
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BW303599.1 GI:24884210
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Location/Qualifiers
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Nori Satoh unpublished cDNA library, neural
alis cDNA clone cinc030b19 5', mRNA sequence.
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/mol_type="mRNA"
/db_xref="taxon:7719"
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/clone_Tib="Nori Satoh unpublished cDNA library,
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/clone="cinc018d19"
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/mol_type="mRNA"
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Pred. No. 2
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                                                                                                    Fizames, C., Fischer, C., Decision of the compact Saurin, W., Bernot, A. and Weissenbach, J. Characterization and repeat analysis of the compact freshwater pufferfish Tetraodon nigroviridis freshwater pufferfish (7), 939-949 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                          AL282105.1 GI:8020441
GSS; genome survey sequence.
Tetraodon nigroviridis
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
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Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
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Ciona intestinalis
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Tetraodon nigroviridis genome survey sequence PUC-Ori end of clo
095J14 of library G from Tetraodon nigroviridis, genomic survey
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Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :
                    Genoscope.
Direct Submission
                                                                                                                                                                                                  Roest Crollius, H., Jaillon, O., Dasilva, C., Ozouf-Costaz, C., Fizames, C., Fischer, C., Bouneau, L., Billault, A., Quetier, F.
                                                                                                                                                                                                                                                                                                    Estimate of human gene number provided by genome-wide analysis using Tetraodon nigroviridis DNA sequence Nat. Genet. 25 (2), 235-238 (2000)
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Fax: 81-75-705-1113
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Department of Zoology
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Phlebobranchia; Cionidae; Ciona.
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/db_xref="taxon:7719"
/clone="rcinc030j13"
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/clone_lib="Nori Satoh unpublished cDNA library, neural
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94.4%;
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SCBFAD1093H09.g AD1 Saccharum officinarum cDNA clone
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CA196886
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                                                                                                                                                                                                                                                                                                                                        Clone distribution; clone distribution information can be through the Brazilian Clone Collection Center (BCCC) at http://www.bcccenter.fcav.unesp.br plate: 093 row: H column: 09 Seg primer: T7 Promoter Primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Centro de Biologia Molecular e Engenharia Genetica
Universidade Estadual de Campinas
Caixa Postal 6010, 13083-970, Campinas SP, Brazil
Tel: 55 19 3788 1137
Fax: 55 19 3788 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saccharum officinarum Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Saccharum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genet. Mol. Biol.
Contact: Arruda P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vettore,A.L., da Silva,F.R., Kemper,E.
The libraries that made SUCEST
Genet. Mol. Biol. 24 (1-4), 1-7 (2001)
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                                                   /note=Torgan: seedlings inoculated with Gluconacetobacter diazotroficans; Vector: pSport1; Site_1: SalI; Site_2: NotI; An unidirectional cDNA library generated from [seedlings inoculated with Gluconacetobacter diazotroficans]. CDNA was prepared from polyA+ mRNA using SuperScript Plasmid System Kit (Invitrogen). The double-strand cDNAs were fractionated in a sepharose
CL-2B 40cm-columns and fragments sizing between 0.8 and 1.5 Kb were directionally cloned into the vector. Detail of each source of RNA and library construction can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Tetraodon nigroviridis"
/mal_type="genomic DNA"
/db_xref="teaxon:99883"
/clone="095J14"
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                             mol_type="mRNA"
db_xref="taxon:4547"
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lab_host="DH10B"
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 Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
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Best Local Similarity
Matches 18; Conserv
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BG931701
BG931701.1
                               CD190559 314 bp mRNA 1 MS1-0064U-A263-G08-U.B MS1-0064 Schistosoma MS1-0064U-A263-G08.B, mRNA sequence. CD190559 CD190559.1 GI:34720529 EST.
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h112-118 h112 S. mansoni adult mi
Fietto/DeMarco/Verjovski-Almeida
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Schistosoma mansoni
Schistosoma mansoni
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: 55-11-3091-2173 Fax: 55-11-3091-2186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Departmento de Bioquimica,
Universidade de Sao Paulo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Verjovski-Almeida
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  verjo@iq.usp.br.
                                                                                                                                                                                                                                                                                                                                                                                  /dev_stage="Adult"
/clone lib="h112 S. mansoni adult mini-library,
/clone lib="h112 S. mansoni adult mini-library,
Fietto/DeMarco/Verjovski-Almeida"
/note="Vector: Bluescript SK; minilibrary constructed
using low-stringency RT-PCR and consensus-degenerate
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85.7%;
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Pred. No. 1.9e
0; Mismatches
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Pred. No. 2.2e+03;
); Mismatches 3
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Instituto de
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Sao Paulo

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REFERENCE
AUTHORS
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CD183371
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ORGANISM
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Ojopi, E. P.B., Paquola, A.C.M., Piazza, J.P., Nishiyama, M.Y. Jr., Kitajima, J.P., Adamson, R.E., Ashton, P.D., Bonaldo, M.F., Coulson, P.S., Dillon, G.P., Farias, L.P., Gregorio, S.P., Ho, P.L., Leite, R.A., Malaquias, L.C.C., Marques, R.C.P., Miyasato, P.A., Nascimento, A.L.T.O., Ohlweiler, F.P., Reis, E.M., Ribeiro, M.A., Sa, R.G., Stukart, G.C., Soares, M.B., Garqioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.B.N., Wilson, R.A., Menck, C.F.M., Setubal, J.C., Leite, L.C. and Dias-Neto, E.
                                                                                                                                                                                                                                                                                                                                                              CD183371 315 bp mRNA linear MS1-0038U-A246-C02-U.B MS1-0038 Schistosoma mansoni MS1-0038U-A246-C02.B, mRNA sequence.
CD183371 CD183371.1 GI:34713578
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
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Ojopi,E.P.B., Paquola,A.C.M., Piazza,J.P., Nishiyama,
                                                                                                                                                                                                                                               Schistosoma mansonı
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
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This sequence was derived from the FAPESP Schistosoma mansoni
                                                                                                                                                                                                                                                                                                                    Schistosoma mansoni
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jovski-Almeida,S.,
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+55-11-3091-2186
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/db_xref="taxon:6183"
/clone="MS1-0064U-A263-G08.B"
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/dev_stage="schistosomulum"
/lab_host="in vitro culture"
/clone_lib="MS1-0064"
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85.7%;
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Pred. No. 2.3e
0; Mismatches
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.3e+03;
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This sequence was derived from the FAPESP Schistosoma mansoni ES
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be see
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0038U-A246 row: 2 column: C.
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Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
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                                                                                                                                  Sequences have been trimmed to exclude PolyA, vector and regions below Phred quality 16. The threshold for high quality sequence is 20. Three-prime sequences, which are obtained with PolyTMix or T7 sequencing primer, are presented as the reverse complement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Sorghum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IP1_23_C09.g1_A002
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: +55-11-3091-2173
Fax: +55-11-3091-2186
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                                                                     High quality sequence start: High quality sequence stop: 3
                                                                                                                 Seq primer: T7
                                                                                                                                                                                                                                                      Tel: 706 542 1860
Fax: 706 583 0210
                                                                                                                                                                                                                                                                                                  Laboratory for Genomics and Bioinformatics
The University of Georgia, Department of Plant Biology
Plant Sciences Building, Rm. 2502, Athens, GA 30602-7271, USA
                                                                                                                                                                                                                                                                                                                                                                   Unpublished (2001)
Contact: Cordonnier-Pratt MM
                                                                                                                                                                                                                                                                                                                                                                                                            An EST database from Sorghum: developing preanthesis pannicles
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Klein, R.R., Cordonnier-Pratt, M.-M., Gingle, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sorghum bicolor
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EST.
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                                                                                                                                                                                                                              Email: mmpratt@uga.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                 Pratt, L.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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/lab_host="in vitro culture"
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/db_xref="taxon:6183"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="MS1-0038U-A246-C02.B"
/sex="mixed pool"
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85.7%;
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Pred. No. 2.3e+03;
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Le 1 (IP1) Sorghum
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Sudman, M. and

EST 20-JUN-2001 n bicolor cDNA,

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REFERENCE
AUTHORS
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ORGANISM
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LOCUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18;
                                                                                                                                                                                                                                                                                  Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0011T-0106 row: 7 column: F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD177754 329 bp mRNA linear EST 14-SEP MS1-0011T-D106-F07-U.G MS1-0011 Schistosoma mansoni cDNA clone MS1-0011T-D106-F07.G, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 329)
Verjovski-Almeida, S., DeMarco, R., Martins, E.A.L., Guimaraes, P.E.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: +55-11-3091-2173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transcriptome analysis of the acoelomate human parasite Schistosoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.
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CD177754.1 GI:34708220
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/note="Organ: Developing preanthesis pannicles; Vector:
pBluescript II SK(-) from Lambda Zap II; Site_1: XhoI;
Site_2: EcoRI; The library was made from poly-A RNA in the
cloning vector lambda ZAP II. Clones to be sequenced were
prepared by mass excision."
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                      /dev_stage="schistosomulum"
/lab_host="in vitro culture"
/clone_lib="MS1-0011"
                                                                                                       /clone="MS1-0011T-D106-F07.G"
/sex="mixed pool"
                                                                                                                                                                                                            organism="Schistosoma
                                                                                                                                                                                                                                                              ocation/Qualifiers
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85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MC1-0096T-D093 row: 7 column: B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 Sao Paulo -
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Fax: +55-11-3091-2186
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                                                                                  TCGTCGATCGATCGAGTTGAT 111
                                                                                                                      TCGTCGAACGTTCGAGATGAT 21
                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                     /lab_host="Biomphalaria glabrata"
/clone_lib="MC1-0096"
                                                                                                                                                                                                                                                                                                                                                                                           'mol_type="mRNA"
'db_xref="taxon:6183"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ocation/Qualifiers
                                                                                                                                                                                                                                                                note="Vector: pGEM T-easy"
                                                                                                                                                                                                                                                                                                                         dev_stage="cercaria"
                                                                                                                                                                                                                                                                                                                                               sex="mixed pool"
                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Schistosoma mansoni"
                                                                                                                                                                                                                                                                                                                                                                    lone="MC1-0096T-D093-B07.G"
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85.7%;
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                                                                                                                                                                                  Score 16.2; DB 14
Pred. No. 2.3e+03;
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Pred. No. 2.
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                                                                                                                                                                                                     DB 14;
                                                                                                                                                                                                     Length 342;
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REFERENCE
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KEYWORDS
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CD190376/c
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Best Local (
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                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.

1 (bases 1 to 374)
Wing,R.A. and Dean,R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clemson University Genomics Institute
Clemson University
100 Jordan Hall, Clemson, SC 29634, US
Tel: 864 656 7288
Fax: 864 656 4293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nbxb0055D20f CUGI Rice BAC Library Oryza sativa (japonica cultivar-group) genomic clone nbxb0055D20f, genomic survey
CD190376 375 bp mRNA linear MS1-0064U-A245-H12-U.B MS1-0064 Schistosoma mansoni MS1-0064U-A245-H12.B, mRNA sequence. CD190376 CD190376.1 GI:34720349
                                                                                                                                                                                                                                    1 TCGTCGAACGTTCGAGATGAT 21
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GSS.
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Class: BAC ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A BAC End Sequencing Framework to Sequence the
                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="CUGI Rice_BAC Library"
/clone_lib="CUGI Rice_BAC Library"
/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
/note="Vector: pBeloBAC11; Site_1: HindIII; Rice is one of two most popular grains in the
world. Half of the world population especially those
inhabiting highly populated areas of the humid tropics
and subtropics, rely on rice as their primary source of
carbohydrate. Monocotyledonous rice is a diploid plant
(2n=24) with a haploid genome equivalent of 431 Mbp
(Arumuganathan and Earle, 1991). The relatively small
genome of rice, three times larger than that of
Arabidopsis, makes it suitable for genomic studies. In
order to facilitate positional cloning, physical mapping
and genome sequencing of rice, we have constructed a BAC
library from Carrac cattire Numbers variety. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rwing@clemson.edu
                                                                                                                                                                                                                                                                                                                                                                                and genome sequencing of rice, we have constructed a BAC library from Oryza sativa, Nipponbare variety. The library contains 36,864 clones with an average insert size of 128.5 Kb providing 10.9 haploid genome equivalents. The deep coverage allows the isolation a particular sequence with a probability of 99.9 %. Two high density filters, each containing 18,432 clones (doubly spotted), represent the whole library for colony screening."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Oryza sativa
/mol_type="genomic DNA"
/strain="Japonica"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="Leaf"
/lab_host="E._coli_DH10B"
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/clone="nbxb0055D20f"
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85.7%;
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Pred. No. 2.
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CD178552/c
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Ojopi, E.P.B., Paquola, A.C.M., Piazza, J.P., Nishiyama, M.Y. Jr., Kitajima, J.P., Adamson, R.E., Ashton, P.D., Bonaldo, M.F., Coulson, P.S., Dillon, G.P., Farias, L.P., Gregorio, S.P., Ho, P.L., Leite, R.A., Malaquias, L.C.C., Marques, R.C.P., Miyasato, P.A., Nascimento, A.L.T.O., Ohlweiler, F.P., Reis, E.M., Ribeiro, M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Verjovski-Almeida,S., DeMarco,R., Martins,E.A.L., Guimaraes,P.E.M., Ojopi,E.P.B., Paquola,A.C.M., Piazza,J.P., Nishiyama,M.Y. Jr., Kitajima,J.P., Adamson,R.E., Ashton,P.D., Bomaldo,M.F., Coulson,P.S., Dillon,G.P., Farias,L.P., Gregorio,S.P., Ho,P.L., Leite,R.A., Malaquias,L.C.C., Marques,R.C.P., Miyasato,P.A., Mascimento,A.L.T.O., Ohlweiler,F.P., Reis,E.M., Ribeiro,M.A., Sa,R.G., Stukart,G.C., Soares,M.B., Gargioni,C., Kawano,T., Rodrigues,V., Madeira,A.M.B.N., Wilson,R.A., Menck,C.F.M., Setubal,J.C., Leite,L.C.C. and Dias-Neto,E.
                                                                                                                                                                                                                                                                    Bukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeidida; Schistosomatoidea; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MS1-0014P-A231-C01-U.B MS1-0014 Schistosoma mansoni cDNA clone MS1-0014P-A231-C01.B, mRNA sequence.
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This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0064U-A245 row: 12 column: H.
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Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 Sao Paulo -
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Fax: +55-11-3091-2186
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/clone="MS1-0064U-A245-H12.B"
/sex="mixed_pool"
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/lab_host="in_vitro_culture"
/clone_lib="MS1-0064"
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/mol_type="mRNA"
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85.7%;
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Pred. No. 2.4e+03;
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                                                                                                                                                                                                                                                                                    Guimaraes, P.E.M.,
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                                                                       COMMENT
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                                                                                            JOURNAL
MEDLINE
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Best Local :
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                                                                                                                                                          Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.

E 1 (bases 1 to 384)

E Verjovski-Almeida, S., DeMarco, R., Martins, E.A.L., Guimaraes, P.E.M.,
Ojopi, E.P.B., Paquola, A.C.M., Piazza, J.P., Nishiyama, M.Y. Jr.,
Kitajima, J.P., Adamson, R.E., Ashton, P.D., Bonaldo, M.F.,
Coulson, P.S., Dillon, G.P., Farrias, L.P., Gregorio, S.P., Ho, P.L.,
Leite, R.A., Malaquias, L.C.C., Marques, R.C.P., Miyasato, P.A.,
Nascimento, A.L.T.O., Ohlweiler, F.P., Reis, E.M., Ribeiro, M.A.,
Sa, R.G., Stukart, G.C., Soares, M.B., Gargioni, C., Kawano, T.,
Rodrigues, V., Madeira, A.M.B.N., Wilson, R.A., Menck, C.F.M.,
Setubal, J.C., Leite, L.C.C. and Dias-Neto, E.
Transcriptome analysis of the accelomate human parasite Schistosoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0014P-A231 row: 1 column: C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schistosoma mansoni
Schistosoma mansoni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CD187006 384 bp mRNA linear EST 14-SEP MS1-0056U-V332-D10-U.B MS1-0056 Schistosoma mansoni cDNA clone MS1-0056U-V332-D10.B, mRNA sequence.
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Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 Sao Paulo -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sa,R.G., Stukart,G.C., Soares,M.B., Gargioni,C., Kawano,T., Rodrigues,V., Madeira,A.M.B.N., Wilson,R.A., Menck,C.F.M., Setubal,J.C., Leite,L.C.C. and Dias-Neto,E.
Transcriptome analysis of the accelomate human parasite Schistosoma
                    Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CD187006
CD187006.1 GI:34717091
                                                                       Contact: Dr. Sergio Verjovski-Almeida
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Prof. Lineu Prestes 748 sala 1200, 05508-900
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                                                                                                                   Genet. 35 (2),
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/lab_host="in vitro culture"
/clone_lib="MS1-0014"
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sex="mixed pool"
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|mol_type="mRNA"
|db_xref="taxon:6183"
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85.7%;
                                                                                                                        148-157
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Pred. No. 2.4e+03;
0; Mismatches 3;
                                                                                                                        (2003)
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Sao Paulo -
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VERSION
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CD190545/c
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                                                                                                                          Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni ES
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be see
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0064U-A263 row: 10 column: D.
                                                                                                                                                                                                                                                                                                                                                Contact: L. J. J. Departamento de Bioquimica Departamento de Bioquimica Instituto de Quimica - Universidade de Sao Paulo Instituto de Quimica - Universidade de Sao Paulo Instituto de Quimica - Universidade de Sao Paulo Instituto de Prestes 748 sala 1200, 05508-900
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CD190545.1 GI:34720515
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MS1-0064U-A263-D10-U.B MS1-0064 Schistosoma
MS1-0064U-A263-D10.B, mRNA sequence.
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Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bioinfo.iq.usp.br/schisto/
Plate: MSI-0056U-V332 row: 10 column: D.
                                                                                                                                                                                                                                                                                                                                                                                                                                           22879926
Contact: Dr. Sergio Verjovski-Almeida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Schistosoma mansoni
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/mol_type="mRNA"
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/clone="MS1-00560-V332-D10.B"
/sex="mixed pool"
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/lab_host="in vitro culture"
/clone_lib="MS1-0056"
/organism="Schistosoma
/mol_type="mRNA"
/db_xref="taxon:6183"
                                                                                                  Location/Qualifiers
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85.7%;
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Pred. No. 2.4e+03;
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CDNA clone
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RESULT 39
CD124011/c
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ojopi, E. P.B., Paquola, A.C.M., Piazza, J.P., Nishiyama, M.Y. Jr., Kitajima, J.P., Adamson, R.E., Ashton, P.D., Bonaldo, M.F., Coulson, P.S., Dillon, G.P., Farias, L.P., Gregorio, S.P., Ho, P.L., Leite, R.A., Malaquias, L.C.C., Marques, R.C.P., Miyasato, P.A., Nascimento, A.L.T.O., Ohlweiler, F.P., Reis, E.M., Ribeiro, M.A., Sa, R.G., Stukart, G.C., Soares, M.B., Gargioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.B.N., Wilson, R.A., Menck, C.F.M., Setubal, J.C., Leite, L.C.C. and Dias-Neto, E.
                                                                                                                                                                                                                                                                                                                                       Email: verjo@iq.usp.br
This sequence was derived from the FAPESP Schistosoma mansoni EST
Genome Project. All sequences in the project were assembled and
annotated. This entry and all the assembled sequences can be seen
in the following URL http://bicinfo.iq.usp.br/schisto/
Plate: MEI-0084T-L228 row: 7 column: D.
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Brasi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Dr. Sergio Verjovski-Almeida
Departamento de Bioquimica
Instituto de Quimica - Universidade de Sao Paulo
Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 Sao Paulo -
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CD124011.1 GI:34662045
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: +55-11-3091-2173 Fax: +55-11-3091-2186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.
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                   Similarity
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jovski-Almeida,S., DeMarco,R., Martins,E.A.L.,
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/dev_stage="schistosomulum"
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/note="Vector: pGEM T-easy"
                                                                                                                                                                                                                                                 /organism="Schistosoma mansoni"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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                                                                                                       /note="Vector: pGEM T-easy"
                                                                                                                                                                                                             /db_xref="taxon:6183"
/clone="ME1-0084T-L228-D07.B"
                                                                                                                                                                                           sex="mixed pool"
                   77.1%;
85.7%;
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                                                                                                                           _host="Mus musculus"
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Pred. No. 2.4e+03;
                   Score 16.2; DB 14; Length 392; Pred. No. 2.4e+03;
Mismatches
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1 (bases 1 to 410)

Quatrano, R., Bashiardes, S., Cove, D., Cuming, A., Knight, C., Clifton, S., Marra, M., Hillier, L., Pape, D., Martin, J., Wylie, T., Underwood, K., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Steptoe, M., Gibbons, M., Harvey, N., Ritter, E., Jackson, Y., McCann, R., Waterston, R. and Wilson, R. Leeds, Wash U Moss EST Project
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gb30d66.y1 Moss EST library PPN Physcomitrella pattens cDNA clond
PEP SOURCE ID:PPN140212 5' similar to gb:emb|Z23165.1|ATRBPS18A
A.thaliana ribosomal protein gene (PLANT);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: est@watson.wustl.edu
Libraries were constructed by Dr. Stavros Bashiardes as part of the
Physcomitrella EST program (PBE) at the Univ. of Leeds (UK) and
Washington Univ. in St. Louis (USA) DNA sequencing by: Washington
University Genome Sequencing Center For information on obtaining a
clone please contact: Celia Knight (c.d.knight@leeds.ac.uk)
Seq primer: -40RP from Gibco.
Location/Qualifiers
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. 1
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Contact: Ralph Quatrano
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Physcomitrella patens
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Fax: 314 286 1810
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                                                                                              / Chouse "Poetcor: pBluescript SK-; Site 1: EcoRI; Site 2: /notes "Poetcor: pBluescript SK-; Site 1: EcoRI; Site 2: /notes "Poetcor: pBluescript SK-; Site 1: CDNA was carried Out using Stratagenes 'UniZAP - cDNA synthesis kit'. CDNA was constructed using an oligo dT primer/linker that contains a XhoI site within it. Following ds cDNA synthesis, EcoRI adapters were ligated to the blunt ends and sample was digested with XhoI. The result is cDNA with an EcoRI sticky end on one side and a XhoI sticky end on the other. This cDNA was ligated directionally in UniZAP arms. The vector is designed containing the pBluescript sequence as well as lambda DNA and cDNA is cloned within this pBluescript sequence. The vector was then packaged using Gold gigapackaging extracts. Library was grown in XLIBlue MRF' cells and amplified. The library was excised by mass excision using Stratagens 'Mass excision kit' that uses excision using Stratagens that releases the pBluescript sequence and circularises it as single stranded plasmids that are then packaged (by helper phage) and secreted out of the host cell as phagemids. SOLR cells were transformed with phagemids and the library was plated out on LB-amp plates to select for transformants. Approximately in consider the colonies were grown and recovered. The double
stranded plasmid library was recovered by using Quiagen Midi prep kit. 2 micro grams of each library were used transform DH10B cells by electroporation."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone_lib="Moss EST library PPN"
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'tissue_type="protonemata: 7 day old tissue auxin treated"
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